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MICROWAVE ACOUSTICS HANDBOOK, VOLUME 4, BULK WAVE VELOCITIES--ETC(U)

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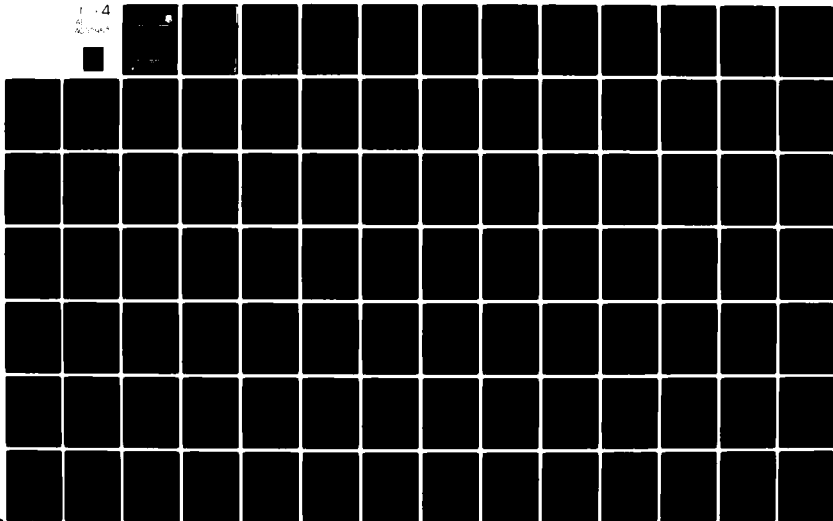
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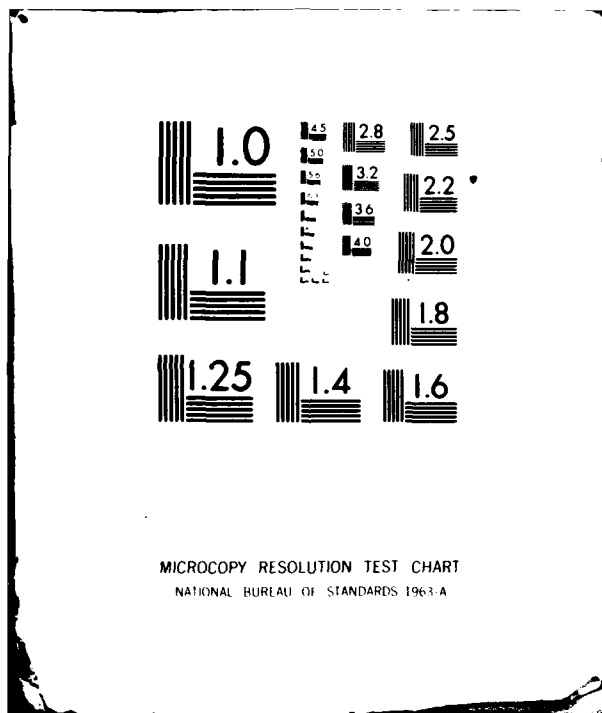
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MICROWAVE ACoustics
Volume 4. Bulk Wave Propagation
Nonmedical Data

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InAs, Lead Molybdate, PbS, LiNbO_3 , LiTaO_3 , MgO, Quartz, Rutile, Sapphire, Silicon, Spinel, TeO_2 , YAG, YGaG, YIG, and ZnO. This present volume is intended to be used as a supplement to Volume 3 whenever accurate numerical data is required rather than the more convenient graphical information.

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Preface

The increasing use of acoustic devices in military and commercial systems has prompted the generation of this Microwave Acoustic Handbook series. Other volumes, either published or in preparation, are: Volume 1A, Surface Wave Velocities; Volume 2, Surface Wave Velocities—Numerical Data; Volume 3, Bulk Wave Velocities (Report Number RADC-TR-80-188). All have different report numbers. This fourth volume consists of numerical data corresponding to many of the graphical curves presented in Volume 3. As this volume is intended as a supplement to Volume 3, particularly for the serious acoustic design engineer, none of the fundamental notation or theory is repeated here. Rather, the reader is urged to consult Volume 3 prior to utilization of the numerical data contained in the present volume.

In using the data of this volume the reader should be alert to the following potential pitfall. The assignment of first or second shear designations to a particular shear mode does not necessarily correspond to the designation used in Volume 3; interchanges can even occur within a given orientation.

The authors wish to acknowledge the support of E. Cronin, J. Cooney and R.G. Gosselin in the compilation of this report. The computer programming assistance provided by R. T. Delmonico and E. D. Conway of ACSI and J. V. O'Brien formerly of Dabovich and Company was obtained under Air Force Contract.

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Microwave Acoustics Handbook
Volume 4. Bulk Wave Velocities
Numerical Data

1. BULK WAVE NUMERICAL DATA

The following pages consist of computer generated numerical printout for a variety of single crystalline materials and orientations. These orientations are defined in Figure 1. The material constants used to generate this data are those given¹ in Volume 3.

The numerical printout contains the following information. The first column is the variable Euler² angle for the particular cut under investigation, LNGVEL is the longitudinal wave velocity, and LPHI12 and LPHI13 are the longitudinal wave power flow angles. Similar sets of data follow for the first and second shear modes. Note that the first and second shear modes do not necessarily correspond to the fast and slow shear waves and that differences in labels can exist between Volumes 3 and 4.

(Received for publication 16 June 1980)

1. Slobodnik, A. J., Jr., Delmonico, R. T., and Conway, E. D. (1980) Microwave Acoustics Handbook Volume 3. Bulk Wave Velocities, National Technical Information Services, Springfield, Virginia 22151.
2. Goldstein, H. (1950) Classical Mechanics, Addison-Wesley, New York.

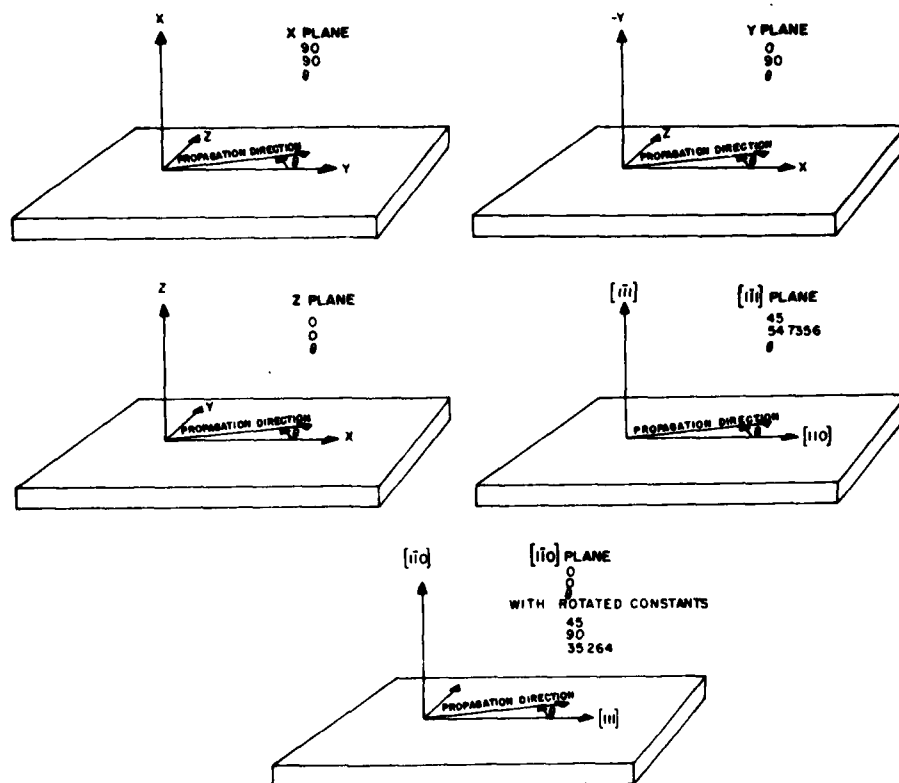


Figure 1. Euler Angle Notation for Acoustic Bulk Wave Propagation. The X plane can also be called the YZ plane, the Y plane can be referred to as the XZ plane, and the Z plane is also known as the XY plane

X-PLANE (YZ-PLANE) BARIUM SODIUM NIOBATE

BULK

	LNGVEL	LPM112	LPM113	FSRVEL	FSPM112	FSPM113	SSRVEL	SSPM112	SSPM113
0.	6026.696	-8.000	-0.000	3766.769	0.000	0.000	3653.660	0.000	0.000
1.	6026.307	-3.70	-0.000	3766.694	-1.130	0.000	3653.615	-1.100	0.000
2.	6025.140	-7.50	-0.000	3766.666	-2.260	0.000	3653.455	-1.190	0.000
3.	6023.197	-1.120	-0.000	3766.687	-3.390	0.000	3653.186	-2.290	0.000
4.	6020.479	-1.450	-0.000	3765.557	-4.520	0.000	3652.816	-3.600	0.000
5.	6016.990	-1.860	-0.000	3764.077	-5.650	0.000	3652.339	-4.660	0.000
6.	6012.733	-2.230	-0.000	3764.046	-6.780	0.000	3651.757	-5.700	0.000
7.	6007.713	-2.600	-0.000	3763.066	-7.910	0.000	3651.074	-6.660	0.000
8.	6001.935	-2.970	-0.000	3761.941	-9.040	0.000	3650.286	-7.750	0.000
9.	6795.405	-3.350	-0.000	3760.666	-1.170	0.000	3649.404	-8.640	0.000
10.	6788.131	-3.690	0.000	3759.250	-1.290	0.000	3648.422	-9.530	0.000
11.	6780.121	-4.050	0.000	3777.688	-1.420	0.000	3647.344	-1.610	0.000
12.	6771.383	-4.480	0.000	3775.985	-1.540	0.000	3646.173	-1.100	0.000
13.	6761.927	-4.750	0.000	3774.142	-1.660	0.000	3644.912	-1.180	0.000
14.	6751.764	-5.160	0.000	3772.161	-1.780	0.000	3643.563	-1.250	0.000
15.	6748.985	-5.440	0.000	3770.944	-1.900	0.000	3642.129	-1.330	0.000
16.	6729.363	-5.760	0.000	3767.794	-2.020	0.000	3640.613	-1.400	0.000
17.	6717.151	-6.110	0.000	3765.413	-2.130	0.000	3639.019	-1.470	0.000
18.	6704.263	-6.430	0.000	3762.904	-2.240	0.000	3637.350	-1.540	0.000
19.	6690.774	-6.750	0.000	3760.270	-2.350	0.000	3635.611	-1.600	0.000
20.	6676.641	-7.060	0.000	3757.514	-2.460	0.000	3633.804	-1.660	0.000
21.	6661.901	-7.370	0.000	3754.636	-2.560	0.000	3631.933	-1.720	0.000
22.	6646.571	-7.670	0.000	3751.646	-2.670	0.000	3630.004	-1.770	0.000
23.	6630.672	-7.960	0.000	3748.542	-2.760	0.000	3628.020	-1.820	0.000
24.	6614.223	-8.240	0.000	3745.328	-2.860	0.000	3625.986	-1.860	0.000
25.	6597.246	-8.510	0.000	3742.005	-2.950	0.000	3623.907	-1.900	0.000
26.	6579.763	-8.760	0.000	3738.586	-3.040	0.000	3621.786	-1.940	0.000
27.	6561.796	-9.030	0.000	3735.069	-3.130	0.000	3619.629	-1.970	0.000
28.	6543.375	-9.270	0.000	3731.456	-3.210	0.000	3617.441	-2.000	0.000
29.	6524.521	-9.500	0.000	3727.754	-3.300	0.000	3615.226	-2.020	0.000
30.	6505.262	-9.720	0.000	3723.966	-3.370	0.000	3612.990	-2.040	0.000
31.	6485.627	-9.930	0.000	3720.097	-3.440	0.000	3610.737	-2.050	0.000
32.	6465.666	-10.120	0.000	3716.152	-3.510	0.000	3608.472	-2.060	0.000
33.	6445.350	-10.300	0.000	3712.134	-3.580	0.000	3606.200	-2.070	0.000
34.	6424.771	-10.460	0.000	3708.045	-3.640	0.000	3603.927	-2.070	0.000
35.	6403.943	-10.610	0.000	3703.902	-3.700	0.000	3601.656	-2.070	0.000
36.	6382.902	-10.740	0.000	3699.696	-3.750	0.000	3599.393	-2.060	0.000
37.	6361.685	-10.860	0.000	3695.438	-3.800	0.000	3597.142	-2.050	0.000
38.	6340.331	-10.950	0.000	3691.132	-3.840	0.000	3594.907	-2.030	0.000
39.	6318.479	-11.020	0.000	3686.783	-3.880	0.000	3592.692	-2.010	0.000
40.	6297.372	-11.060	0.000	3682.397	-3.920	0.000	3590.503	-1.990	0.000
41.	6275.853	-11.110	0.000	3677.976	-3.950	0.000	3588.341	-1.960	0.000
42.	6254.369	-11.120	0.000	3673.532	-3.960	0.000	3586.211	-1.930	0.000
43.	6232.967	-11.100	0.000	3669.065	-4.000	0.000	3584.115	-1.900	0.000
44.	6211.697	-11.060	0.000	3664.581	-4.020	0.000	3582.056	-1.870	0.000
45.	6190.510	-10.980	0.000	3660.086	-4.030	0.000	3580.036	-1.830	0.000
46.	6169.761	-10.890	0.000	3655.585	-4.040	0.000	3578.057	-1.800	0.000
47.	6149.204	-10.760	0.000	3651.085	-4.040	0.000	3576.120	-1.760	0.000
48.	6128.999	-10.590	0.000	3646.589	-4.040	0.000	3574.226	-1.720	0.000
49.	6109.206	-10.400	0.000	3642.105	-4.030	0.000	3572.374	-1.680	0.000

X-PLANE (YZ-PLANE) BARIUM SODIUM NIOBATE

	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
50.	-10.170	0.000	3637.636	-4.020	0.000	3570.563	-1.650	0.000
51.	-9.980	0.000	3633.192	-4.006	0.000	3568.793	-1.610	0.000
52.	-9.590	0.000	3628.774	-3.960	0.000	3567.061	-1.560	0.000
53.	-9.240	0.000	3624.386	-3.950	0.000	3565.365	-1.550	0.000
54.	-8.850	0.000	3620.042	-3.920	0.000	3563.701	-1.520	0.000
55.	-8.410	0.000	3615.739	-3.880	0.000	3562.064	-1.500	0.000
56.	-7.930	0.000	3611.485	-3.840	0.000	3560.449	-1.460	0.000
57.	-7.480	0.000	3607.266	-3.790	0.000	3558.852	-1.470	0.000
58.	-6.820	0.000	3603.147	-3.740	0.000	3557.265	-1.460	0.000
59.	-6.280	0.000	3599.073	-3.680	0.000	3555.682	-1.460	0.000
60.	-5.530	0.000	3595.070	-3.620	0.000	3554.094	-1.470	0.000
61.	-4.800	0.000	3591.142	-3.550	0.000	3552.496	-1.480	0.000
62.	-4.040	0.000	3587.295	-3.480	0.000	3550.877	-1.510	0.000
63.	-3.220	0.000	3583.533	-3.406	0.000	3549.231	-1.540	0.000
64.	-2.370	0.000	3579.862	-3.320	0.000	3547.550	-1.570	0.000
65.	-1.480	0.000	3576.286	-3.230	0.000	3545.825	-1.620	0.000
66.	-0.550	0.000	3572.810	-3.140	0.000	3544.051	-1.670	0.000
67.	1.370	0.000	3569.436	-3.050	0.000	3542.222	-1.720	0.000
68.	2.340	0.000	3566.175	-2.950	0.000	3540.333	-1.780	0.000
69.	3.320	0.000	3563.025	-2.850	0.000	3538.380	-1.840	0.000
70.	4.260	0.000	3559.992	-2.740	0.000	3536.364	-1.900	0.000
71.	5.200	0.000	3557.080	-2.630	0.000	3534.284	-1.960	0.000
72.	6.080	0.000	3554.294	-2.510	0.000	3532.145	-2.010	0.000
73.	6.900	0.000	3551.636	-2.390	0.000	3529.953	-2.060	0.000
74.	7.630	0.000	3549.110	-2.270	0.000	3527.716	-2.100	0.000
75.	8.260	0.000	3546.720	-2.150	0.000	3525.446	-2.120	0.000
76.	8.780	0.000	3544.469	-2.020	0.000	3523.159	-2.130	0.000
77.	9.150	0.000	3542.359	-1.890	0.000	3520.873	-2.120	0.000
78.	9.370	0.000	3540.394	-1.750	0.000	3518.606	-2.100	0.000
79.	9.410	0.000	3538.577	-1.620	0.000	3516.384	-2.050	0.000
80.	9.270	0.000	3536.909	-1.480	0.000	3514.224	-1.970	0.000
81.	8.940	0.000	3535.393	-1.340	0.000	3512.169	-1.870	0.000
82.	8.400	0.000	3534.031	-1.190	0.000	3510.231	-1.750	0.000
83.	7.670	0.000	3532.825	-1.050	0.000	3508.441	-1.600	0.000
84.	6.740	0.000	3531.777	-0.900	0.000	3506.826	-1.420	0.000
85.	5.630	0.000	3530.887	-0.750	0.000	3505.411	-1.220	0.000
86.	4.370	0.000	3530.157	-0.600	0.000	3504.219	-1.010	0.000
87.	2.990	0.000	3529.589	-0.450	0.000	3503.270	-0.770	0.000
88.	1.520	0.000	3529.182	-0.300	0.000	3502.580	-0.520	0.000
89.	-0.800	0.000	3528.938	0.000	0.000	3502.021	-0.260	0.000
90.	-1.520	0.000	3528.857	0.150	0.000	3501.611	0.000	0.000
91.	-2.990	0.000	3529.182	0.300	0.000	3501.270	0.000	0.000
92.	-4.370	0.000	3529.589	0.450	0.000	3501.010	0.000	0.000
93.	-5.630	0.000	3530.157	0.600	0.000	3500.826	0.000	0.000
94.	-6.740	0.000	3530.887	0.750	0.000	3500.770	0.000	0.000
95.	-7.670	0.000	3531.777	0.900	0.000	3500.826	0.000	0.000
96.	-8.400	0.000	3532.825	1.050	0.000	3500.941	0.000	0.000
97.	-8.940	0.000	3534.031	1.190	0.000	3501.231	0.000	0.000
98.	-9.270	0.000	3535.393	1.340	0.000	3501.699	0.000	0.000
99.								

X-PLANE (YZ-PLANE) BARIUM SODIUM NIOBATE

	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
100.	-9.410	-0.000	3536.909	1.480	-0.000	3514.229	1.570	-0.000
101.	-9.370	-0.000	3530.577	1.620	-0.000	3516.384	2.050	-0.000
102.	-9.150	-0.000	3540.394	1.750	-0.000	3516.086	2.100	-0.000
103.	-8.760	-0.000	3542.359	1.890	-0.000	3520.873	2.120	-0.000
104.	-8.260	-0.000	3544.469	2.020	-0.000	3523.159	2.130	-0.000
105.	-7.630	-0.000	3546.720	2.150	-0.000	3525.446	2.120	-0.000
106.	-6.900	-0.000	3549.110	2.270	-0.000	3527.716	2.100	-0.000
107.	-6.080	-0.000	3551.636	2.390	-0.000	3529.953	2.060	-0.000
108.	-5.200	-0.000	3554.294	2.510	-0.000	3532.145	2.010	-0.000
109.	-4.280	-0.000	3557.060	2.630	-0.000	3534.284	1.960	-0.000
110.	-3.320	-0.000	3559.992	2.740	-0.000	3536.364	1.900	-0.000
111.	-2.340	-0.000	3563.025	2.850	-0.000	3538.380	1.840	-0.000
112.	-1.370	-0.000	3566.115	2.950	-0.000	3540.333	1.780	-0.000
113.	-0.400	-0.000	3569.436	3.056	-0.000	3542.222	1.720	-0.000
114.	.550	-0.000	3572.810	3.140	-0.000	3544.051	1.670	-0.000
115.	1.460	-0.000	3576.286	3.230	-0.000	3545.823	1.620	-0.000
116.	2.370	0.000	3579.862	3.320	-0.000	3547.550	1.570	-0.000
117.	3.220	0.000	3583.533	3.400	-0.000	3549.231	1.540	-0.000
118.	4.040	0.000	3587.295	3.480	-0.000	3550.877	1.510	-0.000
119.	4.800	0.000	3591.142	3.550	-0.000	3552.496	1.480	-0.000
120.	5.530	0.000	3595.070	3.620	-0.000	3554.094	1.470	-0.000
121.	6.200	0.000	3599.073	3.680	-0.000	3555.682	1.460	-0.000
122.	6.820	0.000	3603.147	3.740	-0.000	3557.265	1.460	-0.000
123.	7.400	0.000	3607.286	3.790	-0.000	3558.852	1.470	-0.000
124.	7.930	0.000	3611.485	3.846	-0.000	3560.449	1.460	-0.000
125.	8.410	0.000	3615.739	3.880	-0.000	3562.064	1.500	-0.000
126.	8.850	0.000	3620.042	3.920	-0.000	3563.701	1.520	-0.000
127.	9.240	0.000	3624.386	3.950	-0.000	3565.365	1.550	-0.000
128.	9.590	0.000	3628.774	3.980	-0.000	3567.061	1.580	-0.000
129.	9.900	0.000	3633.192	4.000	-0.000	3568.793	1.610	-0.000
130.	10.170	0.000	3637.638	4.024	-0.000	3570.563	1.650	-0.000
131.	10.400	0.000	3642.105	4.030	-0.000	3572.374	1.680	-0.000
132.	10.590	0.000	3646.589	4.040	-0.000	3574.226	1.720	-0.000
133.	10.760	0.000	3651.085	4.040	-0.000	3576.120	1.760	-0.000
134.	10.900	0.000	3655.585	4.040	-0.000	3578.057	1.800	-0.000
135.	11.090	0.000	3660.086	4.030	-0.000	3580.036	1.830	-0.000
136.	11.260	0.000	3664.581	4.020	-0.000	3582.056	1.870	-0.000
137.	11.400	0.000	3669.085	4.000	-0.000	3584.115	1.900	-0.000
138.	11.510	0.000	3673.592	3.990	-0.000	3586.211	1.930	-0.000
139.	11.610	0.000	3677.976	3.950	-0.000	3588.341	1.960	-0.000
140.	11.680	0.000	3682.337	3.920	-0.000	3590.503	1.990	-0.000
141.	11.720	0.000	3686.703	3.880	-0.000	3592.692	2.010	-0.000
142.	11.740	0.000	3691.132	3.840	-0.000	3594.907	2.030	-0.000
143.	11.740	0.000	3695.438	3.800	-0.000	3597.142	2.050	-0.000
144.	11.720	0.000	3699.696	3.750	-0.000	3599.393	2.060	-0.000
145.	11.680	0.000	3703.902	3.700	-0.000	3601.656	2.070	-0.000
146.	11.610	0.000	3708.049	3.640	-0.000	3603.927	2.070	-0.000
147.	11.510	0.000	3712.134	3.580	-0.000	3606.200	2.070	-0.000
148.	11.370	0.000	3716.152	3.510	-0.000	3608.472	2.060	-0.000
149.	11.190	0.000	3720.097	3.440	-0.000	3610.737	2.050	-0.000

X-PLANE (YZ-PLANE) BARIUM SODIUM NIOBATE										BULK	
	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13		
150.	6505.262	9.720	0.000	3723.966	3.370	-0.000	3612.990	2.040	0.000		
151.	6528.521	9.500	0.000	3727.754	3.300	-0.000	3615.226	2.020	0.000		
152.	6543.375	9.270	0.000	3731.456	3.210	-0.000	3617.441	2.000	0.000		
153.	6561.798	9.030	0.000	3735.069	3.130	-0.000	3619.629	1.970	0.000		
154.	6579.763	8.780	0.000	3738.568	3.040	-0.000	3621.786	1.940	0.000		
155.	6597.246	8.510	0.000	3742.009	2.950	-0.000	3623.907	1.900	0.000		
156.	6614.223	8.240	0.000	3745.328	2.860	-0.000	3625.986	1.860	0.000		
157.	6630.622	7.960	0.000	3748.542	2.760	-0.000	3628.020	1.820	0.000		
158.	6646.571	7.670	0.000	3751.646	2.670	-0.000	3630.004	1.770	0.000		
159.	6661.901	7.370	0.000	3754.638	2.560	-0.000	3631.933	1.720	0.000		
160.	6676.641	7.060	0.000	3757.514	2.460	-0.000	3633.804	1.660	0.000		
161.	6690.774	6.750	0.000	3760.270	2.350	-0.000	3635.611	1.600	0.000		
162.	6704.283	6.430	0.000	3762.904	2.240	-0.000	3637.350	1.540	0.000		
163.	6717.151	6.110	0.000	3765.413	2.130	-0.000	3639.019	1.470	0.000		
164.	6729.363	5.790	0.000	3767.794	2.020	-0.000	3640.613	1.400	0.000		
165.	6740.905	5.440	0.000	3770.044	1.900	-0.000	3642.129	1.330	0.000		
166.	6751.764	5.100	0.000	3772.161	1.780	-0.000	3643.563	1.250	0.000		
167.	6761.927	4.750	0.000	3774.142	1.660	-0.000	3644.912	1.180	0.000		
168.	6771.383	4.400	0.000	3775.985	1.540	-0.000	3646.173	1.100	0.000		
169.	6780.121	4.050	0.000	3777.688	1.420	-0.000	3647.344	1.010	0.000		
170.	6788.131	3.690	0.000	3779.250	1.290	-0.000	3648.422	.930	0.000		
171.	6795.405	3.330	0.000	3780.666	1.170	-0.000	3649.404	.848	-0.000		
172.	6801.935	2.970	0.000	3781.941	1.040	-0.000	3650.288	.750	-0.000		
173.	6807.713	2.600	0.000	3783.068	.916	-0.000	3651.074	.660	-0.000		
174.	6812.733	2.230	0.000	3784.046	.780	-0.000	3651.757	.570	-0.000		
175.	6816.990	1.860	0.000	3784.877	.660	-0.000	3652.339	.480	-0.000		
176.	6820.479	1.490	0.000	3785.557	.520	-0.000	3652.816	.388	-0.000		
177.	6823.197	1.120	0.000	3786.087	.390	-0.000	3653.166	.290	-0.000		
178.	6825.140	.750	0.000	3786.466	.260	-0.000	3653.455	.190	-0.000		
179.	6826.307	.370	0.000	3786.694	.130	-0.000	3653.615	.100	-0.000		
180.	6826.696	-0.000	0.000	3786.769	-0.000	-0.000	3653.666	-0.000	-0.000		

Y-PLANE (37-PLANE) CAPTUM SCOTUP NICEATE

	LAP112	LPT113	FSRVEL	FSP112	FSP113	SSRVEL	SSP112	SSP113
0.	0.000	0.000	2786.769	0.000	0.000	2638.239	0.000	0.000
1.	-2.260	0.000	2786.696	-0.148	-0.000	2624.156	-0.116	0.000
2.	-7.720	0.000	2786.476	-2.290	-0.000	2622.676	-2.220	0.000
3.	-1.070	0.000	2786.019	-0.430	-0.000	2622.673	-0.330	0.000
4.	-1.476	0.000	2785.476	-0.580	-0.000	2622.251	-0.440	0.000
5.	-1.750	0.000	2784.687	-0.720	-0.000	2622.710	-0.580	0.000
6.	-2.140	0.000	2783.774	-0.860	-0.000	2622.893	-0.680	0.000
7.	-2.450	0.000	2782.657	-1.010	-0.000	2622.280	-0.750	0.000
8.	-2.640	0.000	2781.450	-1.156	-0.000	2620.296	-0.858	0.000
9.	-2.750	0.000	2780.057	-1.290	-0.000	2620.493	-0.958	0.000
10.	-2.840	0.000	2778.457	-1.428	-0.000	2620.782	-1.048	0.000
11.	-2.940	0.000	2776.779	-1.560	-0.000	2621.101	-1.130	0.000
12.	-3.080	0.000	2776.779	-1.560	-0.000	2625.811	-1.200	0.000
13.	-4.220	0.000	2774.905	-1.700	-0.000	2622.811	-1.300	0.000
14.	-4.550	0.000	2772.877	-1.830	-0.000	2622.486	-1.380	0.000
15.	-4.850	0.000	2770.657	-1.960	-0.000	2622.522	-1.460	0.000
16.	-5.220	0.000	2768.367	-2.090	-0.000	2621.353	-1.530	0.000
17.	-5.540	0.000	2765.851	-2.220	-0.000	2615.705	-1.590	0.000
18.	-5.840	0.000	2763.271	-2.350	-0.000	2617.932	-1.650	0.000
19.	-6.170	0.000	2760.510	-2.470	-0.000	2616.193	-1.680	0.000
20.	-6.480	0.000	2757.610	-2.590	-0.000	2614.331	-1.710	0.000
21.	-6.780	0.000	2754.576	-2.710	-0.000	2612.434	-1.760	0.000
22.	-7.060	0.000	2751.410	-2.820	-0.000	2610.495	-1.800	0.000
23.	-7.340	0.000	2748.116	-2.940	-0.000	2608.482	-1.830	0.000
24.	-7.520	0.000	2744.697	-3.050	-0.000	2606.451	-1.860	0.000
25.	-7.640	0.000	2741.155	-3.150	-0.000	2604.392	-1.880	0.000
26.	-7.760	0.000	2737.503	-3.260	-0.000	2602.315	-1.900	0.000
27.	-7.840	0.000	2733.735	-3.360	-0.000	2600.225	-1.920	0.000
28.	-7.920	0.000	2729.860	-3.450	-0.000	2598.131	-1.940	0.000
29.	-8.000	0.000	2725.880	-3.550	-0.000	2596.042	-1.960	0.000
30.	-8.080	0.000	2721.801	-3.640	-0.000	2593.954	-1.980	0.000
31.	-8.160	0.000	2717.629	-3.720	-0.000	2591.867	-1.990	0.000
32.	-8.240	0.000	2713.364	-3.800	-0.000	2589.777	-2.000	0.000
33.	-8.320	0.000	2709.016	-3.880	-0.000	2587.684	-2.000	0.000
34.	-8.400	0.000	2704.582	-3.960	-0.000	2585.594	-2.000	0.000
35.	-8.480	0.000	2700.045	-4.020	-0.000	2583.506	-2.000	0.000
36.	-8.560	0.000	2695.512	-4.080	-0.000	2581.417	-2.000	0.000
37.	-8.640	0.000	2690.976	-4.140	-0.000	2579.325	-2.000	0.000
38.	-8.720	0.000	2686.440	-4.200	-0.000	2577.235	-2.000	0.000
39.	-8.800	0.000	2681.901	-4.260	-0.000	2575.146	-2.000	0.000
40.	-8.880	0.000	2677.365	-4.320	-0.000	2573.057	-2.000	0.000
41.	-8.960	0.000	2672.830	-4.380	-0.000	2570.968	-2.000	0.000
42.	-9.040	0.000	2668.291	-4.440	-0.000	2568.879	-2.000	0.000
43.	-9.120	0.000	2663.752	-4.500	-0.000	2566.790	-2.000	0.000
44.	-9.200	0.000	2659.213	-4.560	-0.000	2564.701	-2.000	0.000
45.	-9.280	0.000	2654.674	-4.620	-0.000	2562.612	-2.000	0.000
46.	-9.360	0.000	2650.135	-4.680	-0.000	2560.523	-2.000	0.000
47.	-9.440	0.000	2645.596	-4.740	-0.000	2558.434	-2.000	0.000
48.	-9.520	0.000	2641.057	-4.800	-0.000	2556.345	-2.000	0.000
49.	-9.600	0.000	2636.518	-4.860	-0.000	2554.256	-2.000	0.000

Y-PLANE (XZ-PLANE) EFFILP SCCTUP NICENTE

	LPM112	LPM111	FSRVEL	FSRPM112	FSRPM113	SSRVEL	SSRPM112	SSRPM113
50.	6017.734	0.000	3622.327	-4.450	-0.000	3565.510	-386	0.000
51.	5986.058	0.000	3617.476	-4.440	-0.000	3565.231	-210	0.000
52.	5983.086	0.000	3612.594	-4.430	-0.000	3565.043	-130	0.000
53.	5986.723	0.000	3607.748	-4.420	-0.000	3564.832	-50	-0.000
54.	5991.226	0.000	3602.944	-4.4350	-0.000	3564.907	0.000	-0.000
55.	5996.557	0.000	3598.168	-4.4310	-0.000	3564.937	0.000	-0.000
56.	5992.705	0.000	3593.426	-4.4260	-0.000	3565.016	0.000	-0.000
57.	5996.075	0.000	3588.644	-4.4210	-0.000	3565.130	0.000	-0.000
58.	5991.446	0.000	3584.267	-4.4150	-0.000	3565.262	0.000	-0.000
59.	5988.012	0.000	3579.762	-4.4090	-0.000	3565.395	0.000	-0.000
60.	5977.889	0.000	3575.352	-4.4020	-0.000	3565.512	0.000	-0.000
61.	5971.046	0.000	3570.950	-3.3952	-0.000	3565.592	0.000	-0.000
62.	5964.667	0.000	3566.724	-3.3870	-0.000	3565.618	-0.010	-0.000
63.	5958.667	0.000	3562.572	-3.3780	-0.000	3565.568	-0.050	0.000
64.	5955.636	0.000	3558.510	-3.3690	-0.000	3565.423	-100	0.000
65.	5955.002	0.000	3554.522	-3.3600	-0.000	3565.164	-300	0.000
66.	5955.266	0.000	3550.705	-3.3500	-0.000	3564.772	-400	0.000
67.	5951.240	0.000	3546.973	-3.3400	-0.000	3564.233	-500	0.000
68.	5941.042	0.000	3543.368	-3.3290	-0.000	3563.531	-700	0.000
69.	5936.657	-0.000	3539.873	-3.3170	-0.000	3562.656	-800	0.000
70.	5926.210	-0.000	3536.515	-3.3050	-0.000	3561.600	-900	0.000
71.	5915.554	-0.000	3533.260	-2.2930	-0.000	3560.350	-1.200	0.000
72.	5904.715	-0.000	3530.204	-2.2800	-0.000	3558.935	-1.400	0.000
73.	5893.551	-0.000	3527.320	-2.2670	-0.000	3557.332	-1.500	0.000
74.	5882.056	-0.000	3524.463	-2.2530	-0.000	3555.563	-1.700	0.000
75.	5870.067	-0.000	3521.615	-2.2400	-0.000	3553.642	-1.800	0.000
76.	5858.346	-0.000	3518.781	-2.2250	0.000	3551.591	-1.900	0.000
77.	5847.715	-0.000	3516.064	-2.2100	0.000	3549.436	-2.000	0.000
78.	5838.905	-0.000	3513.407	-1.660	0.000	3547.205	-2.000	0.000
79.	5831.632	-0.000	3510.793	-1.600	0.000	3544.945	-2.100	0.000
80.	5825.550	-0.000	3508.345	-1.650	-0.000	3542.662	-2.000	0.000
81.	5820.258	-0.000	3505.965	-1.490	-0.000	3540.461	-2.000	0.000
82.	5815.444	-0.000	3503.756	-1.430	-0.000	3538.325	-1.900	0.000
83.	5811.701	-0.000	3501.615	-1.370	-0.000	3536.315	-1.700	0.000
84.	5808.540	-0.000	3500.527	-1.020	-0.000	3534.474	-1.600	0.000
85.	5805.600	-0.000	3500.421	-0.840	-0.000	3532.801	-1.400	0.000
86.	5803.507	-0.000	3500.363	-0.670	-0.000	3531.451	-1.100	0.000
87.	5802.922	-0.000	3500.323	-0.510	-0.000	3530.336	-900	0.000
88.	5803.582	-0.000	3500.302	-0.340	-0.000	3529.4521	-700	0.000
89.	5805.262	-0.000	3500.311	0.000	-0.000	3528.857	-500	0.000
90.	5808.036	-0.000	3500.321	0.170	-0.000	3528.524	-300	0.000
91.	5811.722	-0.000	3500.341	0.340	-0.000	3528.321	-60	0.000
92.	5815.502	-0.000	3500.363	0.510	-0.000	3528.332	0.000	0.000
93.	5819.922	-0.000	3500.383	0.670	-0.000	3528.451	1.100	0.000
94.	5824.507	-0.000	3500.404	0.840	-0.000	3528.674	1.400	0.000
95.	5829.600	-0.000	3500.4271	1.020	-0.000	3529.024	1.600	0.000
96.	5835.540	-0.000	3500.457	1.170	-0.000	3529.474	1.700	0.000
97.	5842.703	-0.000	3500.495	1.330	-0.000	3529.924	1.900	0.000
98.	5851.424	-0.000	3500.546	1.490	-0.000	3530.325	2.000	0.000
99.	5862.258	-0.000	3500.605	1.650	-0.000	3540.461	2.000	0.000

Y-PLANE (XZ-PLANE) EARLUP SCCTUM NICRATE

	LACNEL	LP+112	LP+112	FSF+112	FSF+112	FSF+112	SSR+112	SSR+112
100.	6022.550	-10.770	-0.000	2510.594	1.658	-0.000	3542.602	0.000
101.	6012.672	-10.770	-0.000	2512.752	1.600	0.000	3544.905	0.000
102.	5992.900	-10.670	-0.000	2514.807	1.560	0.000	3547.205	0.000
103.	5972.715	-10.240	-0.000	2516.964	2.110	0.000	3549.486	0.000
104.	5952.348	-9.760	-0.000	2519.221	2.250	0.000	3551.591	0.000
105.	5932.067	-9.120	-0.000	2521.615	2.400	0.000	3553.642	0.000
106.	5912.085	-8.400	-0.000	2524.463	2.520	-0.000	3555.563	0.000
107.	5892.551	-7.570	-0.000	2527.260	2.670	-0.000	3557.332	1.568
108.	5872.715	-6.670	-0.000	2530.204	2.800	-0.000	3559.035	1.400
109.	5852.564	-5.710	-0.000	2532.250	2.930	-0.000	3560.355	1.220
110.	5832.210	-4.710	-0.000	2534.515	3.050	-0.000	3561.600	0.000
111.	5812.657	-3.660	-0.000	2536.872	3.170	-0.000	3562.656	0.000
112.	5792.042	-2.600	0.000	2542.360	3.260	-0.000	3563.531	0.000
113.	5772.240	-1.620	0.000	2546.972	3.400	-0.000	3564.233	0.000
114.	5752.266	-0.600	0.000	2550.705	3.500	-0.000	3564.772	0.000
115.	5732.082	0.360	0.000	2554.552	3.600	-0.000	3565.154	0.000
116.	5712.626	1.320	0.000	2558.510	3.690	-0.000	3565.423	0.000
117.	5692.867	2.260	0.000	2562.572	3.760	-0.000	3565.566	0.000
118.	5672.657	3.140	0.000	2566.724	3.870	-0.000	3565.618	0.000
119.	5652.045	3.960	0.000	2570.960	3.950	-0.000	3565.592	-0.000
120.	5632.050	4.710	0.000	2575.275	4.020	-0.000	3565.512	-0.000
121.	5612.012	5.460	0.000	2579.762	4.090	-0.000	3565.395	-0.000
122.	5592.445	6.160	0.000	2584.267	4.150	-0.000	3565.262	-0.000
123.	5572.076	6.740	0.000	2588.844	4.210	-0.000	3565.110	-0.000
124.	5552.605	7.310	0.000	2593.486	4.260	-0.000	3564.936	-0.000
125.	5532.551	7.820	0.000	2598.188	4.310	-0.000	3564.747	-0.000
126.	5512.226	8.280	0.000	2602.946	4.350	-0.000	3564.507	-0.000
127.	5492.772	8.700	0.000	2607.746	4.380	-0.000	3564.238	-0.000
128.	5472.608	9.070	0.000	2612.586	4.410	-0.000	3563.902	-0.000
129.	5452.058	9.400	0.000	2617.476	4.440	-0.000	3563.521	-0.000
130.	5432.734	9.690	0.000	2622.387	4.450	-0.000	3563.100	-0.000
131.	5412.925	9.920	0.000	2627.322	4.470	-0.000	3562.607	-0.000
132.	5392.601	10.110	0.000	2632.276	4.470	-0.000	3562.057	-0.000
133.	5372.658	10.210	0.000	2637.279	4.470	-0.000	3561.451	-0.000
134.	5352.152	10.450	0.000	2642.207	4.470	-0.000	3560.761	-0.000
135.	5332.004	10.560	0.000	2647.175	4.460	-0.000	3560.000	-0.000
136.	5312.457	10.620	0.000	2652.177	4.450	-0.000	3559.175	-0.000
137.	5292.075	10.600	0.000	2657.086	4.430	-0.000	3558.240	-0.000
138.	5272.386	10.700	0.000	2662.016	4.400	-0.000	3557.155	-0.000
139.	5252.782	10.700	0.000	2666.921	4.370	-0.000	3556.000	-0.000
140.	5232.423	10.620	0.000	2671.764	4.330	-0.000	3554.782	-0.000
141.	5212.634	10.620	0.000	2676.635	4.290	-0.000	3553.513	-0.000
142.	5192.507	10.530	0.000	2681.421	4.250	-0.000	3552.166	-0.000
143.	5172.278	10.460	0.000	2686.180	4.200	-0.000	3550.725	-0.000
144.	5152.420	10.350	0.000	2690.876	4.140	-0.000	3549.146	-0.000
145.	5132.350	10.220	0.000	2695.512	4.080	-0.000	3547.437	-0.000
146.	5112.154	10.090	0.000	2700.086	4.020	-0.000	3545.636	-0.000
147.	5092.677	9.920	0.000	2704.566	3.950	-0.000	3543.784	-0.000
148.	5072.826	9.740	0.000	2708.916	3.880	-0.000	3541.804	-0.000
149.	5052.871	9.560	0.000	2713.164	3.800	-0.000	3539.777	-0.000

Y-PLANE (XZ-PLANE) EFFICIENCY SCALING ALGORITHM

	LPM112	LPM113	FSP112	FSP113	SSR112	SSR113
150.	9.350	0.000	3.720	-0.000	3551.907	0.000
151.	9.140	0.000	3.640	-0.000	3553.964	0.000
152.	8.920	0.000	3.550	-0.000	3556.042	0.000
153.	8.680	0.000	3.450	-0.000	3558.131	0.000
154.	8.440	0.000	3.360	-0.000	3560.225	0.000
155.	8.180	0.000	3.260	-0.000	3562.315	0.000
156.	7.920	0.000	3.150	-0.000	3564.402	0.000
157.	7.650	0.000	3.050	-0.000	3566.451	0.000
158.	7.380	0.000	2.940	-0.000	3568.482	0.000
159.	7.100	0.000	2.820	-0.000	3570.479	0.000
160.	6.780	0.000	2.710	-0.000	3572.434	0.000
161.	6.460	0.000	2.590	-0.000	3574.341	0.000
162.	6.170	0.000	2.470	-0.000	3576.193	0.000
163.	5.880	0.000	2.350	-0.000	3577.983	0.000
164.	5.590	0.000	2.220	-0.000	3579.705	0.000
165.	5.290	0.000	2.090	-0.000	3581.353	0.000
166.	4.980	0.000	1.960	-0.000	3582.922	0.000
167.	4.660	0.000	1.830	-0.000	3584.406	0.000
168.	4.350	0.000	1.700	-0.000	3585.801	0.000
169.	4.020	0.000	1.560	-0.000	3587.101	0.000
170.	3.690	0.000	1.420	-0.000	3588.307	0.000
171.	3.350	0.000	1.280	-0.000	3589.403	0.000
172.	3.010	0.000	1.150	-0.000	3590.296	0.000
173.	2.660	0.000	1.010	-0.000	3591.200	0.000
174.	2.310	0.000	.860	-0.000	3592.053	0.000
175.	1.950	0.000	.720	-0.000	3592.710	0.000
176.	1.600	0.000	.580	-0.000	3593.251	0.000
177.	1.250	0.000	.430	-0.000	3593.672	0.000
178.	.900	0.000	.280	-0.000	3593.976	0.000
179.	.550	0.000	.140	-0.000	3594.158	0.000
180.	-.000	-0.000	-0.000	0.000	3594.215	-0.000

2-FLAKE (XY-PLANE) RADIUM SODIUM NIOBATE

	LACVEL	LFH12	LFH13	FSEVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	6715.22	0.000	0.000	376.769	0.000	0.000	3374.219	0.000	0.000
1.	6715.362	1.120	0.000	376.539	-0.370	0.000	3374.224	0.010	0.000
2.	6715.843	1.800	0.000	376.928	-0.730	0.000	3374.238	0.020	0.000
3.	6716.605	2.450	0.000	3784.060	-1.090	0.000	3374.262	0.030	0.000
4.	6717.668	3.550	0.000	3783.421	-1.440	0.000	3374.296	0.040	0.000
5.	6719.021	4.720	0.000	3781.559	-1.790	0.000	3374.340	0.050	0.000
6.	6720.664	5.870	0.000	3779.302	-2.130	0.000	3374.393	0.060	0.000
7.	6722.568	7.010	0.000	3776.655	-2.450	0.000	3374.456	0.070	0.000
8.	6724.562	8.140	0.000	3773.659	-2.770	0.000	3374.528	0.080	0.000
9.	6727.227	9.260	0.000	3770.302	-3.070	0.000	3374.618	0.090	0.000
10.	6730.942	1.260	0.000	3766.611	-3.350	0.000	3374.701	0.090	0.000
11.	6735.044	1.450	0.000	3762.504	-3.620	0.000	3374.802	0.100	0.000
12.	6739.049	1.590	0.000	3758.304	-3.870	0.000	3374.913	0.110	0.000
13.	6743.424	1.690	0.000	3753.727	-4.100	0.000	3375.032	0.110	0.000
14.	6748.955	1.740	0.000	3748.912	-4.310	0.000	3375.162	0.120	0.000
15.	6754.741	1.800	0.000	3743.871	-4.500	0.000	3375.308	0.130	0.000
16.	6760.651	1.840	0.000	3738.631	-4.670	0.000	3375.442	0.140	0.000
17.	6766.706	2.000	0.000	3733.221	-4.810	0.000	3375.604	0.150	0.000
18.	6772.850	2.060	0.000	3727.668	-4.930	0.000	3375.770	0.160	0.000
19.	6779.185	2.110	0.000	3722.060	-5.030	0.000	3375.945	0.170	0.000
20.	6785.752	2.150	0.000	3716.246	-5.100	0.000	3376.128	0.180	0.000
21.	6792.037	2.180	0.000	3710.225	-5.140	0.000	3376.320	0.190	0.000
22.	6798.560	2.200	0.000	3704.055	-5.170	0.000	3376.521	0.200	0.000
23.	6793.122	2.210	0.000	3697.755	-5.160	0.000	3376.730	0.200	0.000
24.	6785.708	2.220	0.000	3691.345	-5.130	0.000	3376.948	0.200	0.000
25.	6776.300	2.220	0.000	3684.833	-5.070	0.000	3377.174	0.210	0.000
26.	6764.860	2.210	0.000	3678.222	-4.990	0.000	3377.408	0.210	0.000
27.	6751.827	2.180	0.000	3671.526	-4.890	0.000	3377.649	0.220	0.000
28.	6737.942	2.150	0.000	3664.772	-4.760	0.000	3377.895	0.230	0.000
29.	6723.352	2.100	0.000	3657.915	-4.610	0.000	3378.156	0.240	0.000
30.	6708.066	2.050	0.000	3650.960	-4.430	0.000	3378.420	0.250	0.000
31.	6692.141	1.990	0.000	3643.922	-4.230	0.000	3378.691	0.260	0.000
32.	6675.611	1.920	0.000	3636.803	-4.020	0.000	3378.969	0.270	0.000
33.	6658.452	1.840	0.000	3629.612	-3.790	0.000	3379.253	0.280	0.000
34.	6640.708	1.750	0.000	3622.425	-3.520	0.000	3379.544	0.290	0.000
35.	6622.455	1.650	0.000	3615.227	-3.250	0.000	3379.840	0.300	0.000
36.	6603.701	1.540	0.000	3608.021	-2.960	0.000	3380.143	0.310	0.000
37.	6584.524	1.420	0.000	3600.803	-2.650	0.000	3380.451	0.320	0.000
38.	6564.970	1.290	0.000	3593.582	-2.330	0.000	3380.764	0.330	0.000
39.	6545.021	1.160	0.000	3586.365	-2.000	0.000	3381.081	0.340	0.000
40.	6524.690	1.020	0.000	3579.152	-1.660	0.000	3381.404	0.350	0.000
41.	6503.982	0.870	0.000	3571.942	-1.320	0.000	3381.730	0.360	0.000
42.	6482.900	0.710	0.000	3564.735	-0.960	0.000	3382.060	0.370	0.000
43.	6461.452	0.550	0.000	3557.532	-0.600	0.000	3382.393	0.380	0.000
44.	6439.637	0.380	0.000	3550.333	-0.240	0.000	3382.729	0.390	0.000
45.	6417.462	0.210	0.000	3543.137	0.120	0.000	3383.068	0.400	0.000
46.	6394.933	0.040	0.000	3535.945	0.480	0.000	3383.409	0.410	0.000
47.	6372.057	-0.130	0.000	3528.757	0.840	0.000	3383.752	0.420	0.000
48.	6348.832	-0.300	0.000	3521.572	1.190	0.000	3384.096	0.430	0.000
49.	6325.257	-0.460	0.000	3514.395	1.540	0.000	3384.440	0.440	0.000

2-PLANE (XY-PLANE) BARIUM SODIUM NIOBATE

	LAGVEL	LP+112	LP+113	FSP+112	FSP+113	SSP+112	SSP+113
50.	688.065	.380	0.000	3.226,212	1.000	344.705	0.000
51.	688.055	.320	0.000	3.222,471	0.000	345.131	0.000
52.	688.040	.180	0.000	3.231,069	0.000	345.475	0.000
53.	688.024	.080	0.000	3.234,052	0.000	345.819	0.000
54.	688.017	-0.010	0.000	3.237,351	0.000	346.161	0.000
55.	688.011	-0.066	0.000	3.240,955	0.000	346.501	0.000
56.	688.026	-0.180	0.000	3.244,879	0.000	346.836	0.000
57.	688.164	-0.320	0.000	3.249,073	0.000	347.173	0.000
58.	688.132	-0.340	0.000	3.253,525	0.000	347.504	0.000
59.	688.142	-0.410	0.000	3.258,224	0.000	347.831	0.000
60.	688.401	-0.480	0.000	3.263,127	0.000	348.154	0.000
61.	688.315	-0.550	0.000	3.268,244	0.000	348.472	0.000
62.	688.406	-0.610	0.000	3.273,521	0.000	348.785	0.000
63.	688.774	-0.680	0.000	3.278,943	0.000	349.092	0.000
64.	689.134	-0.710	0.000	3.284,484	0.000	349.392	0.000
65.	689.750	-0.780	0.000	3.290,114	0.000	349.686	0.000
66.	689.175	-0.750	0.000	3.295,817	0.000	349.972	0.000
67.	689.482	-0.820	0.000	3.301,556	0.000	350.251	0.000
68.	689.740	-0.850	0.000	3.307,306	0.000	350.521	0.000
69.	689.947	-0.870	0.000	3.313,040	0.000	350.783	0.000
70.	690.122	-0.880	0.000	3.318,770	0.000	351.036	0.000
71.	690.275	-0.880	0.000	3.324,350	0.000	351.279	0.000
72.	690.421	-0.880	0.000	3.329,872	0.000	351.512	0.000
73.	690.552	-0.880	0.000	3.335,270	0.000	351.735	0.000
74.	690.774	-0.860	0.000	3.340,518	0.000	351.948	0.000
75.	691.051	-0.820	0.000	3.345,550	0.000	352.145	0.000
76.	690.255	-0.820	0.000	3.350,462	0.000	352.340	0.000
77.	692.575	-0.750	0.000	3.355,110	0.000	352.518	0.000
78.	693.974	-0.710	0.000	3.359,512	0.000	352.685	0.000
79.	695.452	-0.680	0.000	3.363,646	0.000	352.839	0.000
80.	697.024	-0.600	0.000	3.367,492	0.000	352.981	0.000
81.	698.595	-0.510	0.000	3.371,032	0.000	353.110	0.000
82.	699.147	-0.510	0.000	3.374,247	0.000	353.226	0.000
83.	699.597	-0.450	0.000	3.377,122	0.000	353.325	0.000
84.	699.936	-0.420	0.000	3.379,643	0.000	353.410	0.000
85.	699.811	-0.360	0.000	3.381,752	0.000	353.494	0.000
86.	699.720	-0.300	0.000	3.383,576	0.000	353.557	0.000
87.	699.792	-0.260	0.000	3.384,964	0.000	353.606	0.000
88.	699.896	-0.150	0.000	3.385,957	0.000	353.640	0.000
89.	699.972	0.000	0.000	3.386,555	0.000	353.661	0.000
90.	699.956	0.000	0.000	3.386,765	0.000	353.666	0.000
91.	699.773	0.000	0.000	3.386,560	0.000	353.661	0.000
92.	699.702	0.000	0.000	3.385,967	0.000	353.640	0.000
93.	699.702	0.000	0.000	3.384,962	0.000	353.606	0.000
94.	699.702	0.000	0.000	3.383,576	0.000	353.557	0.000
95.	699.611	0.000	0.000	3.381,752	0.000	353.494	0.000
96.	699.426	0.000	0.000	3.379,643	0.000	353.410	0.000
97.	699.357	0.000	0.000	3.377,122	0.000	353.325	0.000
98.	699.147	0.000	0.000	3.374,247	0.000	353.226	0.000
99.	698.595	0.000	0.000	3.371,032	0.000	353.110	0.000

Z-PLANE (XY-PLANE) GARIUP SCOTUP NIORATE

	LAGUEL	LFI112	LFI113	FSEVEL	FSP112	FSP113	SSSEVEL	SSP112	SSP113
180.	624.024	.600	0.000	3767.452	-3.236	0.000	3652.561	-320	0.000
181.	633.452	.718	0.000	3767.646	-3.460	0.000	3652.835	-330	0.000
182.	633.974	.750	0.000	3759.512	-3.720	0.000	3652.685	-340	0.000
183.	637.576	.790	0.000	3755.110	-3.950	0.000	3652.510	-350	0.000
184.	648.255	.820	0.000	3750.462	-4.160	0.000	3652.340	-360	0.000
185.	641.991	.850	0.000	3745.590	-4.350	0.000	3652.165	-370	0.000
186.	643.774	.880	0.000	3740.510	-4.520	0.000	3651.940	-380	0.000
187.	645.592	.900	0.000	3735.012	-4.670	0.000	3651.735	-390	0.000
188.	647.431	.920	0.000	3729.012	-4.800	0.000	3651.512	-400	0.000
189.	649.276	.950	0.000	3724.350	-4.900	0.000	3651.270	-410	0.000
190.	651.122	.980	0.000	3718.718	-5.010	0.000	3651.030	-420	0.000
191.	652.947	.970	0.000	3713.040	-5.040	0.000	3650.785	-430	0.000
192.	654.740	.950	0.000	3707.386	-5.080	0.000	3650.521	-440	0.000
193.	656.489	.920	0.000	3701.556	-5.070	0.000	3650.251	-450	0.000
194.	658.176	.750	0.000	3695.617	-5.030	0.000	3649.972	-460	0.000
195.	659.769	.780	0.000	3690.110	-5.030	0.000	3649.666	-470	0.000
196.	661.334	.710	0.000	3684.414	-5.070	0.000	3649.392	-480	0.000
197.	662.774	.660	0.000	3678.943	-5.000	0.000	3649.052	-490	0.000
198.	664.106	.610	0.000	3673.521	-4.770	0.000	3648.765	-500	0.000
199.	665.316	.550	0.000	3668.244	-4.640	0.000	3648.472	-510	0.000
200.	666.401	.480	0.000	3663.127	-4.460	0.000	3648.154	-520	0.000
201.	667.342	.410	0.000	3658.224	-4.310	0.000	3647.831	-530	0.000
202.	668.133	.340	0.000	3653.555	-4.110	0.000	3647.504	-540	0.000
203.	668.764	.280	0.000	3649.073	-3.950	0.000	3647.173	-550	0.000
204.	669.226	.180	0.000	3644.809	-3.680	0.000	3646.832	-560	0.000
205.	669.511	.050	0.000	3640.965	-3.350	0.000	3646.501	-570	0.000
206.	669.613	0.000	0.000	3637.351	-3.180	0.000	3646.161	-580	0.000
207.	669.524	.050	0.000	3634.055	-3.030	0.000	3645.819	-590	0.000
208.	669.240	.180	0.000	3631.055	-2.850	0.000	3645.475	-600	0.000
209.	668.755	.330	0.000	3628.471	-2.610	0.000	3645.131	-610	0.000
210.	668.055	.480	0.000	3626.213	-2.360	0.000	3644.785	-620	0.000
211.	667.157	.610	0.000	3624.315	-2.150	0.000	3644.440	-630	0.000
212.	666.055	.710	0.000	3622.817	-1.980	0.000	3644.096	-640	0.000
213.	664.735	.780	0.000	3621.696	-1.840	0.000	3643.752	-650	0.000
214.	663.207	.780	0.000	3620.956	-1.740	0.000	3643.405	-660	0.000
215.	661.462	.750	0.000	3620.637	-1.600	0.000	3643.060	-670	0.000
216.	659.507	.650	0.000	3620.795	-1.400	0.000	3642.720	-680	0.000
217.	657.343	.500	0.000	3621.12	-1.200	0.000	3642.393	-690	0.000
218.	655.072	.300	0.000	3621.016	-1.000	0.000	3642.060	-700	0.000
219.	652.400	.100	0.000	3621.255	-0.800	0.000	3641.730	-710	0.000
220.	649.631	.000	0.000	3621.955	-0.600	0.000	3641.404	-720	0.000
221.	646.670	.000	0.000	3621.955	-0.400	0.000	3641.081	-730	0.000
222.	643.524	.000	0.000	3621.312	-0.200	0.000	3640.764	-740	0.000
223.	640.201	.000	0.000	3621.111	-0.000	0.000	3640.451	-750	0.000
224.	636.708	.000	0.000	3621.227	0.200	0.000	3640.143	-760	0.000
225.	633.056	.000	0.000	3621.666	0.400	0.000	3639.840	-770	0.000
226.	629.252	.000	0.000	3621.442	0.600	0.000	3639.544	-780	0.000
227.	625.311	.000	0.000	3621.442	0.800	0.000	3639.253	-790	0.000
228.	621.243	.000	0.000	3621.822	1.000	0.000	3638.965	-800	0.000
229.	617.056	.000	0.000	3621.442	1.200	0.000	3638.681	-810	0.000

2-PLANE (XY-PLANE) PARTIAL SCOUT NIGRATE

	LINEL	LPI-112	LPI-113	FSRWEL	FSPI-112	FSP-113	SRWEL	SSPI-112	SSPI-113
150.	6812.762	-2.050	0.000	1680.260	4.430	0.000	2626.420	-240	0.000
151.	6802.552	-2.170	0.000	1665.315	4.610	0.000	2636.156	-240	0.000
152.	6803.942	-2.160	0.000	1670.564	4.768	0.000	2637.999	-220	0.000
153.	6795.412	-2.150	0.000	1675.973	4.858	0.000	2637.646	-220	0.000
154.	6794.860	-2.210	0.000	1681.520	4.990	0.000	2637.406	-210	0.000
155.	6788.800	-2.220	0.000	1687.163	5.070	0.000	2637.174	-210	0.000
156.	6785.708	-2.220	0.000	1692.945	5.130	0.000	2636.948	-200	0.000
157.	6781.122	-2.210	0.000	1698.795	5.160	0.000	2636.730	-150	0.000
158.	6776.560	-2.200	0.000	1704.595	5.170	0.000	2636.521	-190	0.000
159.	6772.027	-2.190	0.000	1710.415	5.140	0.000	2636.320	-180	0.000
160.	6767.571	-2.180	0.000	1716.246	5.100	0.000	2636.120	-170	0.000
161.	6763.185	-2.110	0.000	1722.080	5.050	0.000	2635.935	-160	0.000
162.	6758.853	-2.060	0.000	1727.922	4.980	0.000	2635.770	-150	0.000
163.	6754.706	-2.060	0.000	1733.771	4.910	0.000	2635.604	-140	0.000
164.	6750.651	-1.940	0.000	1739.621	4.870	0.000	2635.440	-130	0.000
165.	6746.741	-1.860	0.000	1745.471	4.800	0.000	2635.280	-120	0.000
166.	6742.951	-1.780	0.000	1751.321	4.710	0.000	2635.162	-110	0.000
167.	6739.224	-1.650	0.000	1757.171	4.610	0.000	2635.033	-100	0.000
168.	6735.549	-1.550	0.000	1763.021	4.520	0.000	2634.913	-90	0.000
169.	6732.024	-1.450	0.000	1768.871	4.420	0.000	2634.802	-80	0.000
170.	6728.642	-1.370	0.000	1774.721	4.330	0.000	2634.701	-70	0.000
171.	6725.342	-1.280	0.000	1780.571	4.240	0.000	2634.610	-60	0.000
172.	6722.127	-1.200	0.000	1786.421	4.170	0.000	2634.528	-50	0.000
173.	6719.000	-1.140	0.000	1792.271	4.100	0.000	2634.456	-40	0.000
174.	6715.964	-1.070	0.000	1798.121	4.030	0.000	2634.393	-30	0.000
175.	6713.021	-1.020	0.000	1803.971	3.970	0.000	2634.340	-20	0.000
176.	6710.166	-0.950	0.000	1809.821	3.910	0.000	2634.296	-10	0.000
177.	6707.406	-0.870	0.000	1815.671	3.850	0.000	2634.262	-030	0.000
178.	6704.842	-0.800	0.000	1821.521	3.790	0.000	2634.238	-020	0.000
179.	6702.365	-0.750	0.000	1827.371	3.730	0.000	2634.224	-010	0.000
180.	6700.022	0.000	0.000	1833.221	-0.000	0.000	2634.219	0.000	0.000

7-PLANE (XY-PLANE) BISMUTH GERMANIUM OXIDE (SLODODNIK ET AL)

	LMVEL	LMJ12	LMJ13	FSPVEL	FSPJ12	FSPJ13	SSRVEL	SSPJ12	SSPJ13
0.	3730.819	0.000	0.000	1664.854	0.000	0.000	1664.854	0.000	0.000
1.	3729.700	-0.560	0.000	1664.968	-0.450	0.000	1665.569	0.000	0.000
2.	3728.743	-1.120	0.000	1665.309	-0.900	0.000	1667.710	5.599	0.000
3.	3727.151	-1.680	0.000	1665.876	-1.350	0.000	1671.264	8.310	0.000
4.	3726.925	-2.240	0.000	1666.665	-1.770	0.000	1676.229	10.920	0.000
5.	3722.871	-2.790	0.000	1667.673	-2.190	0.000	1682.549	13.420	0.000
6.	3718.592	-3.340	0.000	1668.893	-2.600	0.000	1690.224	15.780	0.000
7.	3716.497	-3.880	0.000	1670.320	-3.000	0.000	1699.204	17.980	0.000
8.	3709.792	-4.420	0.000	1671.947	-3.390	0.000	1709.451	20.010	0.000
9.	3706.487	-4.950	0.000	1673.764	-3.740	0.000	1720.914	21.870	0.000
10.	3698.592	-5.470	0.000	1675.762	-4.080	0.000	1733.551	23.570	0.000
11.	3692.119	-5.990	0.000	1677.931	-4.390	0.000	1747.294	25.090	0.000
12.	3685.082	-6.490	0.000	1680.259	-4.690	0.000	1762.084	26.450	0.000
13.	3677.495	-6.980	0.000	1682.736	-4.950	0.000	1777.864	27.660	0.000
14.	3669.375	-7.450	0.000	1685.347	-5.190	0.000	1794.566	28.680	0.000
15.	3660.742	-7.920	0.000	1688.090	-5.410	0.000	1812.113	29.570	0.000
16.	3651.614	-8.360	0.000	1690.921	-5.590	0.000	1830.434	30.320	0.000
17.	3642.015	-8.790	0.000	1693.855	-5.750	0.000	1849.461	30.960	0.000
18.	3631.970	-9.190	0.000	1696.866	-5.870	0.000	1869.111	31.430	0.000
19.	3621.506	-9.580	0.000	1699.944	-5.970	0.000	1889.306	31.800	0.000
20.	3610.652	-9.930	0.000	1703.069	-6.040	0.000	1909.967	32.080	0.000
21.	3599.442	-10.270	0.000	1706.226	-6.070	0.000	1931.014	32.180	0.000
22.	3587.910	-10.560	0.000	1709.401	-6.080	0.000	1952.354	32.219	0.000
23.	3576.097	-10.830	0.000	1712.578	-6.060	0.000	1973.909	32.130	0.000
24.	3564.043	-11.060	0.000	1715.741	-6.010	0.000	1995.590	31.960	0.000
25.	3551.796	-11.260	0.000	1718.876	-5.930	0.000	2017.307	31.550	0.000
26.	3539.405	-11.390	0.000	1721.966	-5.820	0.000	2038.964	31.260	0.000
27.	3526.926	-11.480	0.000	1724.998	-5.690	0.000	2060.679	30.760	0.000
28.	3514.417	-11.520	0.000	1727.956	-5.520	0.000	2081.744	30.150	0.000
29.	3501.943	-11.500	0.000	1730.828	-5.340	0.000	2102.659	29.440	0.000
30.	3489.572	-11.410	0.000	1733.598	-5.130	0.000	2123.127	28.510	0.000
31.	3477.379	-11.260	0.000	1736.255	-4.900	0.000	2143.029	27.650	0.000
32.	3465.443	-11.070	0.000	1741.179	-4.640	0.000	2162.284	26.560	0.000
33.	3453.947	-10.710	0.000	1746.179	-4.370	0.000	2180.762	25.370	0.000
34.	3442.680	-10.300	0.000	1751.423	-4.070	0.000	2198.349	24.030	0.000
35.	3432.034	-9.810	0.000	1756.508	-3.760	0.000	2214.937	22.540	0.000
36.	3422.084	-9.210	0.000	1761.425	-3.430	0.000	2230.397	20.980	0.000
37.	3412.688	-8.520	0.000	1766.163	-3.090	0.000	2244.624	19.110	0.000
38.	3404.190	-7.740	0.000	1770.716	-2.730	0.000	2257.504	17.170	0.000
39.	3396.576	-6.850	0.000	1775.077	-2.360	0.000	2268.937	15.070	0.000
40.	3389.965	-5.870	0.000	1779.238	-1.900	0.000	2279.797	12.820	0.000
41.	3384.431	-4.810	0.000	1783.196	-1.600	0.000	2287.009	10.440	0.000
42.	3380.044	-3.680	0.000	1786.946	-1.200	0.000	2293.687	7.950	0.000
43.	3376.866	-2.490	0.000	1790.493	-0.610	0.000	2298.164	5.350	0.000
44.	3374.948	-1.250	0.000	1793.887	-0.400	0.000	2300.991	2.690	0.000
45.	3374.295	0.000	0.000	1795.915	0.000	0.000	2301.937	0.000	0.000
46.	3374.940	1.250	0.000	1795.807	-0.400	0.000	2300.991	-2.690	0.000
47.	3376.866	2.490	0.000	1795.493	-0.610	0.000	2298.164	-5.350	0.000
48.	3380.044	3.680	0.000	1794.946	-1.200	0.000	2293.687	-7.950	0.000
49.	3384.431	4.810	0.000	1794.196	-1.600	0.000	2287.009	-10.440	0.000

Z-PLANE (XY-PLANE) BISMUTH GERMANIUM OXIDE (SILOMONIK ET AL)

	LNGJEL	LPM12	LPM11	FSPJEL	FSPM12	FSPM13	SSRJEL	SSPM12	SSPM13
50.	3389.965	5.970	0.000	1753.238	-1.990	0.000	2278.797	-12.929	0.000
51.	3396.576	6.950	0.000	1752.077	-2.760	0.000	2268.932	-15.070	0.000
52.	3406.180	7.740	0.000	1750.716	-2.730	0.000	2257.508	-17.170	0.000
53.	3412.680	8.520	0.000	1749.163	-3.090	0.000	2244.626	-19.110	0.000
54.	3422.004	9.210	0.000	1747.625	-3.430	0.000	2230.397	-20.990	0.000
55.	3432.036	9.810	0.000	1745.508	-3.760	0.000	2214.932	-22.590	0.000
56.	3442.688	10.300	0.000	1743.423	-4.070	0.000	2198.749	-24.070	0.000
57.	3453.847	10.710	0.000	1741.179	-4.370	0.000	2180.762	-25.379	0.000
58.	3465.443	11.020	0.000	1738.786	-4.640	0.000	2162.204	-26.590	0.000
59.	3477.379	11.260	0.000	1736.255	-4.900	0.000	2143.039	-27.650	0.000
60.	3489.572	11.410	0.000	1733.598	-5.130	0.000	2123.127	-28.610	0.000
61.	3501.943	11.500	0.000	1730.828	-5.360	0.000	2102.451	-29.480	0.000
62.	3514.417	11.520	0.000	1727.956	-5.520	0.000	2081.743	-30.150	0.000
63.	3526.926	11.480	0.000	1724.998	-5.690	0.000	2060.879	-30.750	0.000
64.	3539.485	11.390	0.000	1721.966	-5.820	0.000	2039.964	-31.260	0.000
65.	3551.795	11.250	0.000	1718.876	-5.930	0.000	2017.307	-31.650	0.000
66.	3564.041	11.060	0.000	1715.741	-6.010	0.000	1995.597	-31.940	0.000
67.	3576.097	10.830	0.000	1712.579	-6.060	0.000	1973.909	-32.130	0.000
68.	3587.910	10.560	0.000	1709.401	-6.090	0.000	1952.353	-32.210	0.000
69.	3599.442	10.270	0.000	1706.226	-6.070	0.000	1931.010	-32.180	0.000
70.	3610.652	9.970	0.000	1703.069	-6.040	0.000	1909.967	-32.060	0.000
71.	3621.586	9.580	0.000	1699.944	-5.970	0.000	1889.305	-31.880	0.000
72.	3631.970	9.190	0.000	1696.868	-5.870	0.000	1869.111	-31.630	0.000
73.	3642.015	8.790	0.000	1693.855	-5.750	0.000	1849.461	-30.940	0.000
74.	3651.614	8.360	0.000	1690.921	-5.590	0.000	1830.435	-30.320	0.000
75.	3660.762	7.920	0.000	1688.080	-5.410	0.000	1812.113	-29.570	0.000
76.	3669.375	7.450	0.000	1685.347	-5.190	0.000	1794.564	-28.690	0.000
77.	3677.695	6.980	0.000	1682.735	-4.950	0.000	1777.068	-27.680	0.000
78.	3685.882	6.490	0.000	1680.259	-4.690	0.000	1760.084	-26.450	0.000
79.	3692.119	5.990	0.000	1677.931	-4.390	0.000	1743.294	-25.090	0.000
80.	3698.592	5.470	0.000	1675.762	-4.090	0.000	1727.551	-23.570	0.000
81.	3704.687	4.950	0.000	1673.754	-3.760	0.000	1709.914	-21.870	0.000
82.	3709.792	4.420	0.000	1671.947	-3.390	0.000	1704.451	-20.010	0.000
83.	3714.697	3.880	0.000	1670.320	-3.000	0.000	1699.204	-17.990	0.000
84.	3718.592	3.340	0.000	1668.893	-2.600	0.000	1694.223	-15.790	0.000
85.	3722.071	2.790	0.000	1667.673	-2.190	0.000	1689.549	-13.420	0.000
86.	3724.925	2.240	0.000	1666.665	-1.770	0.000	1685.229	-10.920	0.000
87.	3727.151	1.680	0.000	1665.876	-1.360	0.000	1671.265	-8.310	0.000
88.	3728.743	1.120	0.000	1665.309	-0.980	0.000	1667.710	-5.590	0.000
89.	3729.780	0.560	0.000	1664.968	-0.450	0.000	1665.564	-2.810	0.000
90.	3730.019	-0.000	0.000	1664.854	0.000	0.000	1665.564	0.000	0.000
91.	3729.780	-0.560	0.000	1664.968	0.450	0.000	1667.710	5.590	0.000
92.	3728.743	-1.120	0.000	1665.309	0.980	0.000	1671.265	8.310	0.000
93.	3727.151	-1.680	0.000	1665.876	1.360	0.000	1675.229	10.920	0.000
94.	3724.925	-2.240	0.000	1666.665	1.770	0.000	1679.549	13.420	0.000
95.	3722.071	-2.790	0.000	1667.673	2.190	0.000	1684.223	15.790	0.000
96.	3718.592	-3.340	0.000	1668.893	2.600	0.000	1689.204	17.990	0.000
97.	3714.697	-3.880	0.000	1670.320	3.000	0.000	1694.451	20.010	0.000
98.	3709.792	-4.420	0.000	1671.947	3.390	0.000	1704.451	21.870	0.000
99.	3704.687	-4.950	0.000	1673.754	3.760	0.000	1709.914	23.570	0.000

7-PLANE (XY-PLANE) BISMUTH GERMANIUM OXIDE (SLODONTK ET AL)

	LMVEL	LPM12	LPM11	FSRVEL	FSPM12	FSPM11	SSRVEL	SSPM12	SSPM11
100.	1698.592	-5.470	0.000	1675.762	4.000	0.000	1731.551	21.579	0.000
101.	1692.119	-5.990	0.000	1677.931	4.190	0.000	1747.204	25.000	0.000
102.	1685.082	-6.490	0.000	1680.259	4.690	0.000	1762.084	26.450	0.000
103.	1677.495	-6.980	0.000	1682.716	4.980	0.000	1777.069	27.640	0.000
104.	1669.375	-7.450	0.000	1685.147	5.190	0.000	1794.565	28.680	0.000
105.	1660.742	-7.920	0.000	1688.080	5.410	0.000	1812.111	29.570	0.000
106.	1651.614	-8.360	0.000	1690.921	5.590	0.000	1830.836	30.320	0.000
107.	1642.015	-8.790	0.000	1693.855	5.750	0.000	1849.461	30.940	0.000
108.	1631.970	-9.190	0.000	1696.868	5.870	0.000	1869.111	31.470	0.000
109.	1621.506	-9.580	0.000	1699.944	5.970	0.000	1889.306	31.900	0.000
110.	1610.652	-9.930	0.000	1703.069	6.040	0.000	1899.367	32.040	0.000
111.	1599.442	-10.270	0.000	1706.225	6.070	0.000	1911.011	32.140	0.000
112.	1587.910	-10.560	0.000	1709.411	6.080	0.000	1922.351	32.210	0.000
113.	1576.097	-10.830	0.000	1712.578	6.060	0.000	1933.900	32.170	0.000
114.	1564.043	-11.060	0.000	1715.741	6.010	0.000	1945.591	31.940	0.000
115.	1551.796	-11.250	0.000	1718.876	5.910	0.000	1957.307	31.550	0.000
116.	1539.405	-11.390	0.000	1721.966	5.820	0.000	1968.964	31.260	0.000
117.	1526.926	-11.480	0.000	1724.998	5.690	0.000	1980.472	30.750	0.000
118.	1514.417	-11.520	0.000	1727.956	5.520	0.000	1991.747	30.150	0.000
119.	1501.963	-11.500	0.000	1730.828	5.340	0.000	2002.659	29.440	0.000
120.	1489.572	-11.410	0.000	1733.594	5.130	0.000	2013.127	28.610	0.000
121.	1477.379	-11.260	0.000	1736.255	4.900	0.000	2023.030	27.650	0.000
122.	1465.443	-11.020	0.000	1738.746	4.650	0.000	2032.284	26.580	0.000
123.	1453.847	-10.710	0.000	1741.174	4.370	0.000	2040.762	25.170	0.000
124.	1442.580	-10.300	0.000	1743.423	4.070	0.000	2048.449	24.030	0.000
125.	1432.034	-9.810	0.000	1745.508	3.760	0.000	2056.330	22.540	0.000
126.	1422.004	-9.210	0.000	1747.425	3.430	0.000	2063.397	20.900	0.000
127.	1412.608	-8.520	0.000	1749.153	3.090	0.000	2069.626	19.110	0.000
128.	1404.180	-7.740	0.000	1750.716	2.730	0.000	2075.004	17.170	0.000
129.	1396.576	-6.850	0.000	1752.077	2.360	0.000	2079.532	15.070	0.000
130.	1389.945	-5.870	0.000	1753.248	1.990	0.000	2083.297	12.820	0.000
131.	1384.411	-4.810	0.000	1754.196	1.600	0.000	2086.303	10.440	0.000
132.	1378.066	-3.690	0.000	1754.946	1.200	0.000	2088.567	7.950	0.000
133.	1376.866	-2.490	0.000	1755.491	0.810	0.000	2090.164	5.350	0.000
134.	1374.940	-1.250	0.000	1755.807	0.400	0.000	2091.091	2.690	0.000
135.	1372.295	0.000	0.000	1755.915	-0.000	0.000	2091.337	-0.000	0.000
136.	1370.940	1.250	0.000	1755.807	-0.400	0.000	2090.991	-2.690	0.000
137.	1370.866	2.490	0.000	1755.491	-0.810	0.000	2090.164	-5.350	0.000
138.	1370.044	3.690	0.000	1754.946	-1.200	0.000	2088.567	-7.950	0.000
139.	1368.411	4.810	0.000	1754.196	-1.600	0.000	2086.303	-10.440	0.000
140.	1369.965	5.870	0.000	1753.248	-1.990	0.000	2083.297	-12.820	0.000
141.	1366.576	6.850	0.000	1752.077	-2.360	0.000	2079.532	-15.070	0.000
142.	1404.180	7.740	0.000	1750.716	-2.730	0.000	2075.004	-17.170	0.000
143.	1412.608	8.520	0.000	1749.153	-3.090	0.000	2069.626	-19.110	0.000
144.	1422.004	9.210	0.000	1747.425	-3.430	0.000	2063.397	-20.900	0.000
145.	1432.034	9.810	0.000	1745.508	-3.760	0.000	2056.330	-22.540	0.000
146.	1442.608	10.300	0.000	1743.423	-4.070	0.000	2048.449	-24.030	0.000
147.	1453.847	10.710	0.000	1741.174	-4.370	0.000	2040.762	-25.170	0.000
148.	1465.443	11.020	0.000	1738.746	-4.650	0.000	2032.284	-26.580	0.000
149.	1477.379	11.260	0.000	1736.255	-4.900	0.000	2023.030	-27.650	0.000

Z-PLANE (XY-PLANE) RISMUTH GERMANIUM OXIDE (SLOMOONIK ET AL)

	LGM12	LGM11	FSRVEL	FSRMI2	FSRMI3	SSRVEL	SSRMI2	SSRMI3
150.	1489.572	11.410	1733.598	-5.130	0.000	2123.127	-28.619	0.000
151.	1501.963	11.500	1730.828	-5.380	0.000	2102.859	-29.448	0.000
152.	1514.417	11.520	1727.956	-5.529	0.000	2081.743	-30.150	0.000
153.	1526.926	11.480	1724.998	-5.690	0.000	2060.879	-30.760	0.000
154.	1539.405	11.390	1721.966	-5.820	0.000	2038.964	-31.260	0.000
155.	1551.706	11.250	1718.876	-5.939	0.000	2017.307	-31.650	0.000
156.	1564.043	11.060	1715.741	-6.010	0.000	1995.590	-31.948	0.000
157.	1576.097	10.830	1712.574	-6.060	0.000	1973.904	-32.130	0.000
158.	1587.910	10.560	1709.491	-6.080	0.000	1952.453	-32.210	0.000
159.	1599.442	10.270	1706.224	-6.070	0.000	1931.010	-32.180	0.000
160.	1610.652	9.930	1703.069	-6.040	0.000	1909.967	-32.040	0.000
161.	1621.506	9.580	1699.944	-5.970	0.000	1889.306	-31.880	0.000
162.	1631.970	9.190	1696.868	-5.879	0.000	1869.111	-31.670	0.000
163.	1642.015	8.790	1693.855	-5.750	0.000	1849.461	-30.940	0.000
164.	1651.614	8.360	1690.921	-5.590	0.000	1830.836	-30.720	0.000
165.	1660.742	7.920	1688.080	-5.410	0.000	1812.113	-29.579	0.000
166.	1669.375	7.450	1685.317	-5.190	0.000	1794.366	-28.680	0.000
167.	1677.495	6.980	1682.716	-4.950	0.000	1777.964	-27.648	0.000
168.	1685.082	6.490	1680.259	-4.690	0.000	1762.084	-26.850	0.000
169.	1692.119	5.990	1677.931	-4.390	0.000	1747.284	-25.898	0.000
170.	1698.592	5.470	1675.762	-4.080	0.000	1733.551	-23.578	0.000
171.	1704.487	4.950	1673.764	-3.740	0.000	1720.914	-21.870	0.000
172.	1709.792	4.420	1671.947	-3.390	0.000	1709.451	-20.010	0.000
173.	1714.497	3.880	1670.320	-3.000	0.000	1699.204	-17.980	0.000
174.	1718.592	3.340	1668.893	-2.600	0.000	1689.223	-15.788	0.000
175.	1722.071	2.790	1667.673	-2.190	0.000	1680.244	-13.420	0.000
176.	1724.925	2.240	1666.655	-1.779	0.000	1672.229	-10.929	0.000
177.	1727.151	1.680	1665.876	-1.360	0.000	1671.264	-8.310	0.000
178.	1728.743	1.120	1665.309	-0.900	0.000	1667.710	-5.590	0.000
179.	1729.780	0.560	1664.954	-0.459	0.000	1665.569	-2.810	0.000
180.	1730.019	-0.000	1664.854	0.000	0.000	1664.854	0.000	0.000

111-PLANE BISMUTH GERMANIUM OXIDE (SLOBOONIK AND SETIMARES)

BULK

	LNGLVL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	3374.295	0.000	-0.000	2301.937	-0.000	0.000	1752.915	0.000	0.000
1.	3374.452	0.300	-0.670	2301.510	-1.220	1.050	1752.174	0.970	0.970
2.	3374.919	0.600	-1.340	2300.233	-2.430	2.050	1756.949	1.930	1.930
3.	3375.691	0.900	-2.000	2298.114	-3.620	3.120	1758.238	2.890	2.890
4.	3376.757	1.170	-2.650	2295.166	-4.760	4.130	1760.038	3.830	3.830
5.	3378.102	1.440	-3.280	2291.416	-5.920	5.130	1762.344	4.750	4.750
6.	3379.709	1.660	-3.900	2286.884	-7.020	6.090	1765.146	5.660	5.700
7.	3381.556	1.900	-4.490	2281.601	-8.070	7.030	1768.444	6.540	6.600
8.	3383.620	2.100	-5.070	2275.605	-9.070	7.940	1772.220	7.390	7.400
9.	3385.873	2.270	-5.610	2268.934	-10.020	8.610	1776.464	8.210	8.300
10.	3388.288	2.410	-6.130	2261.633	-10.900	9.648	1781.183	8.590	9.170
11.	3390.835	2.520	-6.630	2253.751	-11.710	10.430	1786.300	9.740	10.170
12.	3393.483	2.600	-7.090	2245.335	-12.460	11.170	1791.856	10.430	10.770
13.	3396.202	2.650	-7.530	2236.453	-13.130	11.660	1797.808	11.070	11.420
14.	3398.960	2.670	-7.930	2227.152	-13.720	12.540	1804.130	11.660	12.130
15.	3401.726	2.660	-8.310	2217.500	-14.220	13.150	1810.793	12.180	12.670
16.	3404.471	2.620	-8.660	2207.585	-14.620	13.720	1817.760	12.630	13.150
17.	3407.165	2.560	-8.980	2197.420	-15.030	14.240	1824.992	12.990	13.500
18.	3409.775	2.470	-9.270	2187.144	-15.120	14.710	1832.438	13.260	13.670
19.	3412.288	2.350	-9.540	2176.824	-15.160	15.140	1840.041	13.410	13.820
20.	3414.666	2.210	-9.770	2166.557	-15.100	15.530	1847.730	13.400	13.950
21.	3416.890	2.050	-9.990	2156.453	-14.860	15.670	1855.424	13.310	14.010
22.	3418.938	1.880	-10.160	2146.634	-14.410	15.610	1863.020	13.090	13.920
23.	3420.792	1.680	-10.340	2137.245	-13.740	16.410	1870.397	12.470	13.620
24.	3422.434	1.470	-10.480	2126.450	-12.600	16.620	1877.410	11.660	13.250
25.	3423.846	1.240	-10.600	2120.437	-11.530	16.790	1883.887	10.560	12.840
26.	3425.024	1.010	-10.700	2113.416	-9.910	16.910	1889.629	9.140	12.410
27.	3425.949	0.760	-10.770	2107.620	-7.910	17.000	1894.422	7.320	12.000
28.	3426.615	0.510	-10.830	2103.269	-5.530	17.070	1898.046	5.130	11.620
29.	3427.018	0.260	-10.860	2100.565	-2.850	17.110	1900.315	2.650	11.210
30.	3427.152	0.000	-10.870	2099.647	-0.000	17.110	1901.087	-0.600	10.820
31.	3427.016	-0.260	-10.860	2100.565	2.850	17.100	1900.315	-2.650	10.410
32.	3426.615	-0.510	-10.830	2103.269	5.530	17.070	1898.046	-5.130	10.000
33.	3425.949	-0.760	-10.770	2107.620	7.910	17.000	1894.422	-7.320	9.590
34.	3425.024	-1.010	-10.700	2113.416	9.910	16.910	1889.629	-9.140	9.160
35.	3423.846	-1.240	-10.600	2120.437	11.530	16.790	1883.887	-10.560	8.750
36.	3422.434	-1.470	-10.480	2126.450	12.600	16.620	1877.410	-11.660	8.250
37.	3420.792	-1.680	-10.340	2137.245	13.740	16.410	1870.397	-12.470	7.690
38.	3418.938	-1.880	-10.160	2146.634	14.410	16.160	1863.020	-13.090	7.000
39.	3416.890	-2.050	-9.990	2156.453	14.860	15.670	1855.424	-13.310	6.210
40.	3414.666	-2.210	-9.770	2166.557	15.100	15.530	1847.730	-13.400	5.390
41.	3412.288	-2.350	-9.540	2176.824	15.160	15.140	1840.041	-13.410	4.410
42.	3409.775	-2.470	-9.270	2187.144	15.120	14.710	1832.438	-13.260	3.410
43.	3407.165	-2.560	-8.980	2197.420	14.930	14.240	1824.992	-12.990	2.390
44.	3404.471	-2.620	-8.660	2207.585	14.620	13.720	1817.760	-12.630	1.350
45.	3401.726	-2.660	-8.310	2217.500	14.220	13.150	1810.793	-12.180	0.270
46.	3398.960	-2.670	-7.930	2227.152	13.720	12.540	1804.130	-11.660	0.000
47.	3396.202	-2.650	-7.530	2236.453	13.130	11.660	1797.808	-11.070	0.000
48.	3393.483	-2.600	-7.090	2245.335	12.460	11.170	1791.856	-10.430	0.000
49.	3390.835	-2.520	-6.630	2253.751	11.710	10.430	1786.300	-9.740	0.000

111-PLANE BISMUTH GERMANIUM OXIDE (SLOBODNIK AND SETHARES)

BULK

	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
50.	3388.288	-2.410	2261.633	10.900	9.640	1761.163	-6.990	9.170
51.	3385.873	-2.270	2260.934	10.020	8.610	1776.464	-6.210	0.340
52.	3383.620	-2.100	2275.605	9.070	7.940	1772.220	-7.390	7.480
53.	3381.556	-1.900	2281.601	8.070	7.030	1766.444	-6.540	8.600
54.	3379.789	-1.680	2286.884	7.020	6.090	1765.148	-5.660	5.700
55.	3378.182	-1.440	2291.416	5.920	5.130	1762.344	-4.750	4.760
56.	3376.757	-1.170	2295.168	4.760	4.130	1760.038	-3.840	3.840
57.	3375.691	-900	2298.114	3.620	3.120	1758.238	-2.890	2.890
58.	3374.919	-600	2300.233	2.430	2.090	1756.949	-1.930	1.930
59.	3374.452	-300	2301.510	1.220	1.050	1756.174	-0.970	0.970
60.	3374.295	-0.000	2301.937	0.000	0.000	1755.915	0.000	0.000
61.	3374.452	.300	2301.510	-1.220	-1.050	1756.174	.970	0.970
62.	3374.919	.600	2300.233	-2.430	-2.090	1756.949	1.930	1.930
63.	3375.691	.900	2298.114	-3.620	-3.120	1758.238	2.890	2.890
64.	3376.757	1.170	2295.169	-4.760	-4.130	1760.038	3.840	3.840
65.	3378.182	1.440	2291.417	-5.920	-5.130	1762.344	4.750	4.750
66.	3379.789	1.680	2286.884	-7.020	-6.090	1765.148	5.660	5.660
67.	3381.556	1.900	2281.601	-8.070	-7.030	1766.444	6.540	6.540
68.	3383.620	2.100	2275.605	-9.070	-8.070	1772.220	7.390	7.390
69.	3385.873	2.270	2268.934	-10.020	-9.610	1776.464	8.210	8.210
70.	3388.288	2.410	2261.633	-10.900	-10.430	1781.163	9.170	9.170
71.	3390.835	2.520	2253.751	-11.710	-11.170	1786.300	10.430	10.430
72.	3393.683	2.600	2245.339	-12.460	-11.860	1791.656	11.400	11.400
73.	3396.202	2.650	2236.453	-13.130	-12.540	1797.606	12.130	12.130
74.	3398.960	2.670	2227.152	-13.720	-13.150	1804.130	12.630	12.630
75.	3401.728	2.660	2217.500	-14.220	-13.720	1810.793	13.000	13.000
76.	3404.471	2.620	2207.565	-14.620	-14.240	1817.761	13.310	13.310
77.	3407.165	2.560	2197.420	-14.930	-14.710	1824.992	13.590	13.590
78.	3409.779	2.470	2187.144	-15.120	-15.140	1832.438	13.810	13.810
79.	3412.286	2.350	2176.824	-15.180	-15.530	1840.041	14.000	14.000
80.	3414.666	2.210	2166.357	-15.100	-15.870	1847.731	14.140	14.140
81.	3416.890	2.050	2156.453	-14.860	-16.160	1855.424	14.310	14.310
82.	3418.936	1.860	2146.635	-14.410	-16.410	1863.020	14.500	14.500
83.	3420.792	1.660	2137.245	-13.740	-16.620	1870.398	14.700	14.700
84.	3422.433	1.470	2128.450	-12.800	-16.790	1877.411	14.880	14.880
85.	3423.848	1.240	2120.437	-11.530	-16.910	1883.887	15.060	15.060
86.	3425.023	1.010	2113.416	-9.910	-16.910	1889.629	15.140	15.140
87.	3425.946	.760	2107.620	-7.910	-17.000	1894.422	15.300	15.300
88.	3426.615	.510	2103.269	-5.530	-17.110	1900.315	15.420	15.420
89.	3427.017	.260	2100.566	0.000	-17.110	1901.087	15.480	15.480
90.	3427.152	-0.000	2100.566	2.850	-17.070	1900.315	15.530	15.530
91.	3427.017	-.260	2100.566	5.530	-17.070	1898.049	15.480	15.480
92.	3426.615	-.510	2103.269	7.910	-17.000	1894.422	15.320	15.320
93.	3425.946	-.760	2107.620	9.910	-16.910	1889.629	15.140	15.140
94.	3425.023	-1.010	2113.416	11.530	-16.750	1883.887	14.880	14.880
95.	3423.848	-1.240	2120.437	12.800	-16.620	1877.411	14.700	14.700
96.	3422.433	-1.470	2128.450	13.740	-16.410	1870.398	14.500	14.500
97.	3420.792	-1.660	2137.245	14.410	-16.160	1863.020	14.310	14.310
98.	3418.936	-1.860	2146.635	14.860	-15.870	1855.424	14.000	14.000
99.	3416.890	-2.050	2156.453	14.860	-15.670	1847.731	13.590	13.590

111-PLANE BISMUTH GERMANIUM OXIDE (SLOBODNIK AND SETHARES)

BULK

	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
100.	3414.666	-2.210	9.770	2166.557	15.100	-15.530	1647.731	-13.440	-13.630
101.	3412.266	-2.350	9.540	2176.824	15.180	-15.140	1640.041	-13.410	-13.200
102.	3409.779	-2.470	9.270	2187.144	15.120	-14.710	1632.638	-13.260	-14.670
103.	3407.165	-2.560	8.980	2197.820	14.930	-14.240	1624.992	-12.990	-14.110
104.	3404.471	-2.620	8.660	2207.565	14.620	-13.720	1617.761	-12.630	-13.500
105.	3401.726	-2.660	8.310	2217.500	14.520	-13.150	1610.793	-12.160	-12.670
106.	3399.960	-2.670	7.930	2227.152	13.720	-12.540	1604.130	-11.660	-12.190
107.	3398.202	-2.650	7.530	2236.453	13.130	-11.860	1597.808	-11.000	-11.490
108.	3396.463	-2.600	7.090	2245.335	12.460	-11.170	1591.056	-10.430	-10.750
109.	3394.835	-2.520	6.630	2253.751	11.710	-10.430	1584.300	-9.740	-9.970
110.	3393.288	-2.410	6.130	2261.633	10.900	-9.640	1577.163	-8.990	-9.170
111.	3391.873	-2.270	5.610	2268.934	10.020	-8.810	1570.464	-8.210	-8.340
112.	3389.620	-2.100	5.070	2275.605	9.070	-7.940	1563.444	-7.390	-7.460
113.	3387.556	-1.900	4.490	2281.601	8.070	-7.030	1556.148	-6.540	-6.600
114.	3385.705	-1.660	3.900	2286.884	7.020	-6.090	1548.544	-5.680	-5.730
115.	3383.182	-1.440	3.280	2291.417	5.920	-5.130	1540.544	-4.750	-4.780
116.	3380.757	-1.170	2.650	2295.169	4.780	-4.130	1532.163	-3.830	-3.840
117.	3378.491	-900	2.000	2298.114	3.620	-3.120	1523.449	-2.880	-2.890
118.	3376.452	-300	1.340	2301.510	2.430	-2.090	1514.308	-1.930	-1.930
119.	3374.521	0.000	0.670	2304.510	1.220	-1.050	1504.744	-0.970	-0.970
120.	3372.795	0.000	0.000	2307.137	0.000	0.000	1494.744	-0.000	-0.000
121.	3371.242	300	-0.670	2309.510	-1.220	1.050	1484.244	0.970	0.970
122.	3369.819	600	-1.340	2311.510	-2.430	2.090	1473.308	1.930	1.930
123.	3368.591	900	-2.000	2313.114	-3.620	3.120	1461.949	2.880	2.890
124.	3367.577	1.170	-2.650	2295.166	-4.780	4.130	1450.163	3.830	3.840
125.	3366.702	1.440	-3.280	2291.416	-5.920	5.130	1437.944	4.750	4.760
126.	3365.956	1.660	-3.900	2286.884	-7.020	6.090	1425.163	5.680	5.700
127.	3365.320	1.900	-4.490	2281.601	-8.070	7.030	1411.944	6.540	6.560
128.	3364.783	2.100	-5.070	2275.605	-9.070	7.940	1398.244	7.390	7.400
129.	3364.326	2.270	-5.610	2268.934	-10.020	8.810	1384.044	8.210	8.210
130.	3363.935	2.410	-6.130	2261.633	-10.900	9.640	1369.308	8.990	9.000
131.	3363.605	2.520	-6.630	2253.751	-11.710	10.430	1354.044	9.740	9.750
132.	3363.333	2.600	-7.090	2245.339	-12.460	11.170	1338.244	10.430	10.430
133.	3363.102	2.650	-7.530	2236.453	-13.130	11.860	1321.944	11.070	11.070
134.	3362.922	2.670	-7.930	2227.152	-13.720	12.540	1305.163	11.660	11.660
135.	3362.786	2.660	-8.310	2217.500	-14.240	13.150	1287.761	12.160	12.160
136.	3362.691	2.620	-8.660	2207.565	-14.620	13.720	1269.793	12.630	12.630
137.	3362.635	2.560	-8.980	2197.820	-14.930	14.240	1251.244	12.990	12.990
138.	3362.606	2.470	-9.270	2187.144	-15.120	14.710	1232.044	13.260	13.260
139.	3362.606	2.350	-9.540	2176.824	-15.180	15.140	1212.244	13.410	13.410
140.	3362.626	2.210	-9.770	2166.557	-15.100	15.530	1191.808	13.500	13.500
141.	3362.666	2.050	-9.990	2156.453	-14.860	15.670	1170.761	13.550	13.550
142.	3362.722	1.880	-10.180	2146.634	-14.510	15.810	1149.044	13.560	13.560
143.	3362.792	1.660	-10.340	2137.245	-13.740	16.410	1126.761	13.500	13.500
144.	3362.874	1.470	-10.480	2128.450	-12.800	16.620	1103.808	13.410	13.410
145.	3362.966	1.240	-10.600	2119.437	-11.530	16.790	1080.244	13.260	13.260
146.	3363.066	1.010	-10.700	2110.163	-9.910	16.910	1056.044	13.000	13.000
147.	3363.174	760	-10.770	2100.660	-7.910	17.000	1031.244	12.630	12.630
148.	3363.288	510	-10.830	2103.269	-5.530	17.070	1005.808	12.160	12.160
149.	3363.416	260	-10.860	2100.565	-2.850	17.100	980.044	11.660	11.660

111-PLANE BISMUTH GERMANIUM OXIDE (SLOBOONIK AND SETHAUES)

BULK

	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
150.	3427.152	-10.070	2099.647	0.000	17.110	1901.087	0.000	18.240
151.	3427.018	-10.060	2100.565	2.050	17.100	1900.315	-2.650	18.210
152.	3426.615	-10.030	2103.269	5.530	17.070	1896.046	-5.130	18.120
153.	3425.949	-10.770	2107.620	7.910	17.000	1894.422	-7.320	17.960
154.	3425.024	-10.700	2113.416	9.910	16.910	1893.625	-9.140	17.760
155.	3423.648	-10.600	2120.437	11.530	16.790	1893.887	-10.580	17.540
156.	3422.434	-10.470	2128.450	12.800	16.620	1893.410	-11.660	17.290
157.	3420.792	-10.340	2137.245	13.740	16.410	1893.397	-12.470	16.920
158.	3418.938	-10.180	2146.634	14.410	16.160	1893.020	-13.060	16.520
159.	3416.890	-9.990	2156.453	14.860	15.870	1892.124	-13.310	16.140
160.	3414.666	-9.770	2166.557	15.100	15.530	1890.730	-13.440	15.690
161.	3412.268	-9.540	2176.824	15.160	15.140	1888.041	-13.410	15.280
162.	3409.779	-9.270	2187.144	15.120	14.710	1884.992	-13.260	14.810
163.	3407.165	-8.980	2197.420	14.930	14.240	1881.760	-12.990	14.300
164.	3404.471	-8.660	2207.565	14.620	13.720	1878.293	-12.630	13.740
165.	3401.726	-8.310	2217.500	14.220	13.150	1874.644	-12.180	13.150
166.	3398.960	-7.930	2227.152	13.720	12.540	1870.830	-11.660	12.540
167.	3396.202	-7.530	2236.453	13.130	11.880	1866.866	-11.070	11.930
168.	3393.463	-7.090	2245.339	12.460	11.170	1862.700	-10.430	11.270
169.	3390.835	-6.630	2253.751	11.710	10.430	1858.300	-9.740	10.570
170.	3388.286	-6.130	2261.633	10.900	9.640	1853.663	-8.990	9.810
171.	3385.873	-5.610	2269.934	10.020	8.810	1848.864	-8.210	9.030
172.	3383.620	-5.070	2275.605	9.070	7.940	1843.820	-7.390	8.180
173.	3381.556	-4.490	2281.601	8.070	7.030	1838.544	-6.540	7.270
174.	3379.709	-3.900	2286.864	7.020	6.090	1833.048	-5.660	6.300
175.	3378.102	-3.280	2291.416	5.920	5.130	1827.344	-4.750	5.360
176.	3376.757	-2.650	2295.166	4.780	4.130	1821.438	-3.830	4.360
177.	3375.691	-2.000	2298.114	3.620	3.120	1815.338	-2.880	3.360
178.	3374.919	-1.340	2300.233	2.430	2.090	1809.049	-1.930	2.360
179.	3374.452	-0.670	2301.510	1.220	1.050	1802.574	-0.970	1.470
180.	3374.295	0.000	2301.937	-0.000	-0.000	1795.915	0.000	-0.000

110-PLANE BISMUTH GERMANIUM OXIDE (SLOBODNIK AND SETHARES)

BULK

	LPHI12	LPMI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	3310.409	-0.000	2111.051	-14.970	0.000	2111.044	14.970	-0.000
1.	3310.657	-0.000	2101.120	-15.270	-0.000	2120.402	13.650	0.000
2.	3311.426	-0.000	2091.031	-15.560	-0.000	2129.050	12.310	0.000
3.	3312.760	-0.000	2080.794	-15.846	-0.000	2136.603	10.650	0.000
4.	3314.650	0.000	2070.420	-16.110	-0.000	2143.321	9.290	0.000
5.	3317.247	2.850	2059.920	-16.370	-0.000	2148.907	7.660	-0.000
6.	3320.459	3.500	2049.304	-16.610	-0.000	2153.393	5.560	0.000
7.	3324.346	4.170	2038.583	-16.840	-0.000	2156.740	4.280	0.000
8.	3328.921	4.840	2027.770	-17.050	-0.000	2158.912	2.400	-0.000
9.	3334.133	5.520	2016.875	-17.250	-0.000	2159.888	.560	0.000
10.	3340.180	6.180	2005.912	-17.430	-0.000	2159.651	-1.290	0.000
11.	3346.815	6.830	1994.892	-17.590	-0.000	2158.196	-3.140	0.000
12.	3354.143	7.450	1983.827	-17.750	-0.000	2155.527	-4.970	0.000
13.	3362.124	8.050	1972.732	-17.886	-0.000	2151.655	-6.760	0.000
14.	3370.729	8.610	1961.616	-17.990	-0.000	2146.602	-8.550	0.000
15.	3379.925	9.130	1950.500	-18.080	-0.000	2140.396	-10.270	0.000
16.	3389.622	9.600	1939.390	-18.160	-0.000	2133.075	-11.530	0.000
17.	3399.926	10.030	1928.303	-18.210	0.000	2124.680	-13.520	0.000
18.	3410.645	10.410	1917.252	-18.240	-0.000	2115.260	-15.030	0.000
19.	3421.775	10.730	1906.252	-18.250	-0.000	2104.669	-16.470	0.000
20.	3433.265	11.010	1895.316	-18.230	-0.000	2093.564	-17.610	0.000
21.	3445.084	11.230	1884.463	-18.190	-0.000	2081.408	-19.070	0.000
22.	3457.118	11.400	1873.703	-18.130	-0.000	2068.465	-20.240	0.000
23.	3469.374	11.520	1863.052	-18.040	0.000	2054.601	-21.330	0.000
24.	3481.779	11.590	1852.526	-17.930	0.000	2040.487	-22.310	0.000
25.	3494.282	11.610	1842.139	-17.780	-0.000	2025.591	-23.210	0.000
26.	3506.831	11.590	1831.906	-17.610	-0.000	2010.188	-24.020	0.000
27.	3519.378	11.530	1821.843	-17.410	-0.000	1994.340	-24.730	0.000
28.	3531.875	11.420	1811.966	-17.180	-0.000	1978.146	-25.350	0.000
29.	3544.277	11.260	1802.288	-16.930	-0.000	1961.655	-25.860	0.000
30.	3556.540	11.100	1792.825	-16.640	-0.000	1944.951	-26.310	0.000
31.	3568.622	10.890	1783.593	-16.320	-0.000	1928.106	-26.650	0.000
32.	3580.485	10.640	1774.606	-15.960	-0.000	1911.201	-26.890	0.000
33.	3592.089	10.360	1765.879	-15.580	-0.000	1894.306	-27.030	0.000
34.	3603.401	10.060	1757.426	-15.160	-0.000	1877.496	-27.060	0.000
35.	3614.385	9.720	1749.262	-14.710	-0.000	1860.648	-26.990	0.000
36.	3625.012	9.370	1741.402	-14.220	-0.000	1844.434	-26.610	0.000
37.	3635.251	8.990	1733.856	-13.710	0.000	1828.330	-26.520	0.000
38.	3645.075	8.590	1726.644	-13.160	-0.000	1812.608	-26.110	0.000
39.	3654.458	8.170	1719.773	-12.570	-0.000	1797.340	-25.560	0.000
40.	3663.376	7.730	1713.258	-11.960	-0.000	1782.598	-24.920	0.000
41.	3671.806	7.270	1707.110	-11.310	-0.000	1768.450	-24.130	0.000
42.	3679.729	6.800	1701.342	-10.630	-0.000	1754.965	-23.210	0.000
43.	3687.125	6.320	1695.964	-9.930	-0.000	1742.208	-22.140	0.000
44.	3693.977	5.820	1690.967	-9.190	0.000	1730.241	-20.930	0.000
45.	3700.269	5.310	1686.419	-8.420	-0.000	1719.124	-19.560	0.000
46.	3705.988	4.800	1682.271	-7.640	-0.000	1708.514	-18.060	0.000
47.	3711.119	4.270	1678.550	-6.820	-0.000	1699.663	-16.440	0.000
48.	3715.653	3.730	1675.264	-5.990	-0.000	1691.420	-14.660	0.000
49.	3719.579	3.190	1672.416	-5.130	0.000	1684.228	-12.750	0.000

110-PLANE BISMUTH GERMANIUM OXIDE (SLODODNIK AND SETHARES)

BULK

	LNVEL	LPML12	LPML13	FSNVEL	FSPL12	FSPL13	SSRVEL	SSPL12	SSPL13
50.	3722.809	2.650	-0.000	1670.820	-4.260	0.000	1676.125	-10.720	0.000
51.	3725.576	2.000	-0.000	1666.073	-3.360	-0.000	1673.165	-0.550	0.000
52.	3727.633	1.530	-0.000	1666.563	-2.460	-0.000	1669.314	-6.360	0.000
53.	3729.056	.970	-0.000	1665.550	-1.560	-0.000	1666.693	-4.070	0.000
54.	3729.846	.410	-0.000	1664.979	-.670	-0.000	1665.178	-1.730	0.000
55.	3729.997	-.150	-0.000	1664.836	.240	0.000	1664.878	.240	0.000
56.	3729.509	-.710	-0.000	1665.223	1.150	0.000	1665.809	2.970	0.000
57.	3726.365	-1.270	-0.000	1666.036	2.060	0.000	1667.911	5.290	0.000
58.	3726.625	-1.830	-0.000	1667.313	2.960	0.000	1671.192	7.550	0.000
59.	3726.235	-2.390	-0.000	1669.045	3.650	0.000	1675.633	9.730	0.000
60.	3721.219	-2.960	-0.000	1671.230	4.730	0.000	1681.210	11.010	0.000
61.	3717.582	-3.480	-0.000	1673.865	5.590	0.000	1687.892	13.780	0.000
62.	3713.334	-4.020	-0.000	1676.944	6.430	0.000	1695.844	15.620	0.000
63.	3708.463	-4.550	-0.000	1680.461	7.250	0.000	1704.425	17.330	0.000
64.	3703.041	-5.070	-0.000	1684.409	8.060	0.000	1714.189	18.690	0.000
65.	3697.016	-5.580	-0.000	1688.779	8.830	0.000	1724.884	20.310	0.000
66.	3690.428	-6.090	-0.000	1693.564	9.580	0.000	1736.457	21.590	0.000
67.	3683.267	-6.580	-0.000	1698.755	10.300	0.000	1748.069	22.720	0.000
68.	3675.610	-7.050	-0.000	1704.340	10.990	0.000	1760.939	23.710	0.000
69.	3667.417	-7.520	-0.000	1710.310	11.660	0.000	1775.042	24.570	0.000
70.	3658.726	-7.960	-0.000	1716.653	12.290	0.000	1790.312	25.290	0.000
71.	3649.560	-8.390	-0.000	1723.357	12.890	0.000	1805.300	25.860	0.000
72.	3639.941	-8.800	-0.000	1730.441	13.460	0.000	1821.657	26.340	0.000
73.	3629.895	-9.190	-0.000	1737.800	13.960	0.000	1838.790	26.690	0.000
74.	3619.446	-9.560	-0.000	1745.513	14.400	0.000	1853.867	26.920	0.000
75.	3608.626	-9.900	-0.000	1753.536	14.950	0.000	1869.613	27.040	0.000
76.	3597.467	-10.220	-0.000	1761.854	15.380	0.000	1886.356	27.060	0.000
77.	3585.966	-10.510	-0.000	1770.453	15.790	0.000	1903.221	26.970	0.000
78.	3574.251	-10.770	-0.000	1779.320	16.160	0.000	1920.132	26.770	0.000
79.	3562.268	-11.000	-0.000	1788.436	16.490	0.000	1937.014	26.460	0.000
80.	3550.085	-11.200	-0.000	1797.794	16.790	0.000	1953.793	26.100	0.000
81.	3537.744	-11.360	-0.000	1807.372	17.070	0.000	1970.394	25.610	0.000
82.	3525.266	-11.480	-0.000	1817.157	17.310	0.000	1986.741	25.040	0.000
83.	3512.756	-11.570	-0.000	1827.135	17.520	0.000	2002.761	24.370	0.000
84.	3500.202	-11.610	-0.000	1837.289	17.710	0.000	2018.340	23.600	0.000
85.	3487.671	-11.610	-0.000	1847.605	17.860	0.000	2033.524	22.750	0.000
86.	3475.214	-11.560	-0.000	1858.067	17.990	0.000	2048.122	21.800	0.000
87.	3462.861	-11.460	-0.000	1868.661	18.090	0.000	2062.101	20.770	0.000
88.	3450.725	-11.310	0.000	1879.372	18.170	0.000	2075.393	19.640	0.000
89.	3438.799	-11.120	0.000	1890.144	18.220	0.000	2087.929	18.420	0.000
90.	3427.156	-10.870	0.000	1901.082	18.240	0.000	2099.643	17.110	0.000
91.	3415.850	-10.570	0.000	1912.083	18.250	0.000	2110.473	15.720	0.000
92.	3404.932	-10.210	-0.000	1923.061	18.230	0.000	2120.358	14.440	0.000
93.	3394.452	-9.810	-0.000	1934.153	18.160	0.000	2129.243	13.090	0.000
94.	3384.459	-9.360	-0.000	1945.254	18.120	0.000	2137.077	11.660	0.000
95.	3374.998	-8.860	-0.000	1956.370	18.040	0.000	2145.814	9.370	0.000
96.	3366.110	-8.320	0.000	1967.486	17.930	0.000	2154.446	7.620	0.000
97.	3357.831	-7.740	0.000	1978.593	17.810	0.000	2163.846	5.830	0.000
98.	3350.191	-7.130	0.000	1989.674	17.670	0.000	2173.067	4.010	0.000
99.	3343.216	-6.490	-0.000	2000.717	17.510	0.000	2189.116	2.160	0.000

110-PLANE BISMUTH GERMANIUM OXIDE (SLOBODNIK AND SETHARES) BULK

	LNGLVL	LPMI12	LPMI13	FSPMEL	FSPMI12	FSPMI13	SSRMEL	SSPMI12	SSPMI13
100.	3336.923	-5.630	0.000	2011.708	17.340	0.000	2154.928	-1.310	-0.000
101.	3331.323	-5.160	0.000	2022.637	17.150	0.000	2159.523	-1.330	-0.000
102.	3326.419	-4.490	0.000	2033.490	16.940	0.000	2157.913	-3.350	-0.000
103.	3322.209	-3.020	0.000	2044.256	16.720	0.000	2155.117	-5.130	-0.000
104.	3318.680	-3.150	0.000	2054.923	16.480	0.000	2151.164	-6.660	-0.000
105.	3315.617	-2.510	0.000	2065.479	16.240	0.000	2146.091	-8.530	-0.000
106.	3313.595	-1.990	0.000	2075.914	15.970	0.000	2139.944	-10.120	-0.000
107.	3311.985	-1.590	0.000	2086.217	15.700	0.000	2132.773	-11.630	0.000
108.	3310.953	-1.230	0.000	2096.377	15.410	0.000	2124.638	-13.850	-0.000
109.	3310.464	-0.950	0.000	2106.394	15.110	0.000	2115.602	-14.380	-0.000
110.	3310.476	-0.660	0.000	2116.228	14.800	0.000	2105.733	-15.600	-0.000
111.	3310.947	-0.350	0.000	2125.900	14.460	0.000	2095.102	-16.720	-0.000
112.	3311.835	1.070	0.000	2135.390	14.150	0.000	2083.783	-17.750	-0.000
113.	3313.895	1.420	0.000	2144.688	13.810	0.000	2071.851	-18.660	-0.000
114.	3314.885	1.720	0.000	2153.787	13.460	0.000	2059.382	-19.460	-0.000
115.	3316.562	1.990	0.000	2162.676	13.100	0.000	2046.453	-20.190	-0.000
116.	3318.684	2.210	0.000	2171.352	12.730	0.000	2033.140	-20.600	-0.000
117.	3321.013	2.390	0.000	2179.882	12.360	0.000	2019.518	-21.310	-0.000
118.	3323.510	2.540	0.000	2188.620	11.970	0.000	2005.662	-21.730	-0.000
119.	3326.140	2.650	0.000	2195.959	11.580	0.000	1991.644	-22.040	-0.000
120.	3328.870	2.730	0.000	2203.731	11.190	0.000	1977.535	-22.270	-0.000
121.	3331.670	2.780	0.000	2211.210	10.780	0.000	1963.405	-22.390	-0.000
122.	3334.510	2.810	0.000	2218.429	10.370	0.000	1949.319	-22.430	-0.000
123.	3337.365	2.810	0.000	2225.382	9.960	0.000	1935.344	-22.370	-0.000
124.	3340.211	2.760	0.000	2232.063	9.530	0.000	1921.541	-22.210	-0.000
125.	3343.026	2.740	0.000	2238.467	9.110	0.000	1907.971	-21.970	-0.000
126.	3345.792	2.680	0.000	2244.587	8.680	0.000	1894.691	-21.630	0.000
127.	3348.490	2.610	0.000	2250.420	8.240	0.000	1881.758	-21.210	-0.000
128.	3351.105	2.510	0.000	2255.960	7.800	0.000	1869.223	-20.680	0.000
129.	3353.623	2.410	0.000	2261.202	7.350	0.000	1857.139	-20.070	0.000
130.	3356.033	2.300	0.000	2266.142	6.900	0.000	1845.532	-19.370	0.000
131.	3358.322	2.160	0.000	2270.777	6.450	0.000	1834.589	-18.570	-0.000
132.	3360.482	2.040	0.000	2275.101	5.990	0.000	1824.052	-17.690	-0.000
133.	3362.505	1.900	0.000	2279.113	5.530	0.000	1814.221	-16.710	-0.000
134.	3364.383	1.760	0.000	2282.809	5.070	0.000	1805.055	-15.640	-0.000
135.	3366.111	1.610	0.000	2286.185	4.610	0.000	1796.588	-14.500	0.000
136.	3367.683	1.450	0.000	2289.239	4.140	0.000	1788.852	-13.260	0.000
137.	3369.094	1.300	0.000	2291.969	3.670	0.000	1781.677	-11.960	-0.000
138.	3370.342	1.130	0.000	2294.372	3.200	0.000	1775.688	-10.580	-0.000
139.	3371.622	0.970	0.000	2296.447	2.730	0.000	1770.309	-9.130	0.000
140.	3372.333	0.800	0.000	2298.192	2.250	0.000	1765.768	-7.630	-0.000
141.	3373.073	0.640	0.000	2299.605	1.780	0.000	1762.058	-6.080	-0.000
142.	3373.639	0.478	0.000	2300.686	1.300	0.000	1759.216	-4.460	0.000
143.	3374.031	0.308	0.000	2301.433	0.830	0.000	1757.246	-2.860	0.000
144.	3374.248	0.138	0.000	2301.846	0.350	0.000	1756.155	-1.220	-0.000
145.	3374.289	-0.050	0.000	2301.925	-0.130	0.000	1755.946	0.440	0.000
146.	3374.155	-0.220	0.000	2301.670	-0.600	0.000	1756.621	2.890	0.000
147.	3373.046	-0.390	0.000	2301.080	-1.080	0.000	1758.177	3.720	0.000
148.	3373.362	-0.560	0.000	2300.157	-1.560	0.000	1760.608	5.330	0.000
149.	3372.784	-0.720	0.000	2298.900	-2.030	0.000	1763.986	6.900	0.000

110-PLANE BISMUTH GERMANIUM OXIDE (SLOBODNIK AND SETHAUES)										BULK	
	LHVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13		
150.	3371.873	-0.690	0.000	2297.312	-2.580	0.000	1766.057	8.430	0.000		
151.	3370.873	-1.060	0.000	2295.393	-2.560	0.000	1773.047	9.500	0.000		
152.	3369.704	-1.220	0.000	2293.144	-3.450	0.000	1776.856	11.310	0.000		
153.	3368.369	-1.360	0.000	2290.568	-3.920	0.000	1782.464	12.660	0.000		
154.	3366.832	-1.540	0.000	2287.667	-4.390	0.000	1782.844	13.920	0.000		
155.	3365.216	-1.690	0.000	2284.442	-4.650	0.000	1800.970	15.110	0.000		
156.	3363.410	-1.840	0.000	2280.897	-5.320	0.000	1809.610	16.220	0.000		
157.	3361.455	-1.960	0.000	2277.034	-5.760	0.000	1819.331	17.230	0.000		
158.	3359.358	-2.110	0.000	2272.857	-6.230	0.000	1829.497	18.160	0.000		
159.	3357.125	-2.240	0.000	2268.368	-6.690	0.000	1840.264	19.000	0.000		
160.	3354.775	-2.360	0.000	2263.571	-7.140	0.000	1851.605	19.750	0.000		
161.	3352.307	-2.470	0.000	2258.471	-7.590	0.000	1863.460	20.410	0.000		
162.	3349.736	-2.560	0.000	2253.072	-8.030	0.000	1875.789	20.970	0.000		
163.	3347.075	-2.650	0.000	2247.377	-8.470	0.000	1888.540	21.440	0.000		
164.	3344.339	-2.710	0.000	2241.391	-8.900	0.000	1901.663	21.620	0.000		
165.	3341.545	-2.770	0.000	2235.121	-9.330	0.000	1915.103	22.110	0.000		
166.	3338.711	-2.800	0.000	2228.570	-9.760	0.000	1928.804	22.310	0.000		
167.	3335.857	-2.810	0.000	2221.744	-10.180	0.000	1942.705	22.410	0.000		
168.	3333.007	-2.800	0.000	2214.650	-10.590	0.000	1956.747	22.420	0.000		
169.	3330.165	-2.760	0.000	2207.293	-11.000	0.000	1970.864	22.340	0.000		
170.	3327.416	-2.690	0.000	2199.679	-11.400	0.000	1984.992	22.160	0.000		
171.	3324.737	-2.590	0.000	2191.616	-11.790	0.000	1999.062	21.690	0.000		
172.	3322.123	-2.460	0.000	2183.711	-12.160	0.000	2013.003	21.520	0.000		
173.	3319.760	-2.300	0.000	2175.369	-12.560	0.000	2026.745	21.050	0.000		
174.	3317.535	-2.090	0.000	2166.800	-12.930	0.000	2040.213	20.490	0.000		
175.	3315.538	-1.850	0.000	2158.010	-13.290	0.000	2053.332	19.630	0.000		
176.	3313.807	-1.570	0.000	2149.009	-13.640	0.000	2066.026	19.060	0.000		
177.	3312.366	-1.240	0.000	2139.803	-13.990	0.000	2078.223	18.190	0.000		
178.	3311.317	-0.870	0.000	2130.602	-14.336	0.000	2089.641	17.220	0.000		
179.	3310.643	-0.460	0.000	2120.815	-14.650	0.000	2100.806	16.140	0.000		
180.	3310.409	-0.000	0.000	2111.051	-14.970	0.000	2111.044	14.570	0.000		

Z-PLANE (XY-PLANE) BISMUTH GERMANIUM OXIDE (KRAUT ET AL)										BULK	
	LMVEL	LPM112	LPM113	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13		
0.	3737.066	0.000	0.000	1665.507	0.000	0.000	1665.507	0.000	0.000		
1.	3736.600	-0.570	0.000	1665.621	0.450	0.000	1666.239	2.460	0.000		
2.	3735.702	-1.150	0.000	1665.963	0.900	0.000	1668.430	5.720	0.000		
3.	3734.074	-1.720	0.000	1666.532	1.340	0.000	1672.071	8.590	0.000		
4.	3731.799	-2.260	0.000	1667.324	1.780	0.000	1677.193	11.170	0.000		
5.	3728.800	-2.850	0.000	1668.334	2.200	0.000	1683.623	13.720	0.000		
6.	3725.323	-3.410	0.000	1669.559	2.610	0.000	1691.478	16.120	0.000		
7.	3721.135	-3.970	0.000	1670.990	3.010	0.000	1700.673	18.360	0.000		
8.	3716.322	-4.510	0.000	1672.621	3.390	0.000	1711.163	20.430	0.000		
9.	3710.895	-5.060	0.000	1674.444	3.750	0.000	1722.991	22.320	0.000		
10.	3704.863	-5.590	0.000	1676.446	4.090	0.000	1735.834	24.040	0.000		
11.	3698.230	-6.120	0.000	1678.624	4.410	0.000	1749.904	25.560	0.000		
12.	3691.034	-6.630	0.000	1680.960	4.700	0.000	1765.049	26.950	0.000		
13.	3683.265	-7.130	0.000	1683.444	4.970	0.000	1781.204	28.150	0.000		
14.	3674.948	-7.620	0.000	1686.063	5.210	0.000	1798.301	29.200	0.000		
15.	3666.101	-8.100	0.000	1688.805	5.420	0.000	1816.266	30.160	0.000		
16.	3656.746	-8.560	0.000	1691.634	5.610	0.000	1835.032	30.960	0.000		
17.	3646.903	-9.000	0.000	1694.597	5.760	0.000	1854.516	31.480	0.000		
18.	3636.598	-9.420	0.000	1697.619	5.890	0.000	1874.643	31.570	0.000		
19.	3625.850	-9.810	0.000	1700.705	5.990	0.000	1895.333	32.340	0.000		
20.	3614.712	-10.150	0.000	1703.840	6.050	0.000	1916.503	32.590	0.000		
21.	3603.194	-10.530	0.000	1707.007	6.090	0.000	1938.071	32.730	0.000		
22.	3591.339	-10.850	0.000	1710.132	6.100	0.000	1959.952	32.760	0.000		
23.	3579.186	-11.130	0.000	1713.376	6.070	0.000	1982.056	32.660	0.000		
24.	3566.776	-11.370	0.000	1716.551	6.020	0.000	2004.302	32.500	0.000		
25.	3554.161	-11.570	0.000	1719.695	5.940	0.000	2026.591	32.210	0.000		
26.	3541.306	-11.730	0.000	1722.795	5.830	0.000	2048.832	31.820	0.000		
27.	3528.509	-11.840	0.000	1725.835	5.700	0.000	2070.931	31.320	0.000		
28.	3515.590	-11.890	0.000	1728.803	5.540	0.000	2092.768	30.720	0.000		
29.	3502.693	-11.860	0.000	1731.683	5.350	0.000	2114.301	30.000	0.000		
30.	3489.691	-11.800	0.000	1734.462	5.140	0.000	2135.366	29.170	0.000		
31.	3477.259	-11.660	0.000	1737.127	4.910	0.000	2155.875	28.220	0.000		
32.	3464.800	-11.430	0.000	1739.665	4.650	0.000	2175.716	27.140	0.000		
33.	3452.839	-11.120	0.000	1742.066	4.300	0.000	2194.774	25.530	0.000		
34.	3441.230	-10.710	0.000	1744.317	4.080	0.000	2212.932	24.260	0.000		
35.	3430.149	-10.210	0.000	1746.406	3.770	0.000	2230.089	23.000	0.000		
36.	3419.697	-9.610	0.000	1748.330	3.440	0.000	2246.064	21.430	0.000		
37.	3409.976	-8.900	0.000	1750.073	3.100	0.000	2260.796	19.610	0.000		
38.	3401.006	-8.090	0.000	1751.631	2.740	0.000	2274.143	17.630	0.000		
39.	3393.136	-7.170	0.000	1752.996	2.370	0.000	2285.991	15.500	0.000		
40.	3386.216	-6.160	0.000	1754.161	1.990	0.000	2296.230	13.200	0.000		
41.	3380.416	-5.050	0.000	1755.122	1.600	0.000	2304.760	10.760	0.000		
42.	3375.816	-3.860	0.000	1755.873	1.210	0.000	2311.492	8.190	0.000		
43.	3372.481	-2.610	0.000	1756.413	.610	0.000	2316.355	5.520	0.000		
44.	3370.460	-1.320	0.000	1756.737	.400	0.000	2319.295	2.780	0.000		
45.	3369.783	0.000	0.000	1756.846	0.000	0.000	2320.279	0.000	0.000		
46.	3370.460	1.320	0.000	1756.737	-.400	0.000	2315.295	-2.780	0.000		
47.	3372.481	2.610	0.000	1756.413	-.810	0.000	2316.355	-5.520	0.000		
48.	3375.816	3.860	0.000	1755.873	-1.210	0.000	2311.492	-8.190	0.000		
49.	3380.416	5.050	0.000	1755.122	-1.600	0.000	2304.760	-10.760	0.000		

Z-PLANE (XY-PLANE) BISMUTH GERMANIUM OXIDE (KRAUT ET AL) BULK

	LNVEL	LP12	LP13	FSRVEL	FSP12	FSP13	SSRVEL	SSP12	SSP13
50.	386.216	6.160	0.000	1754.161	-1.990	0.000	2296.230	-13.200	0.000
51.	393.136	7.170	0.000	1752.996	-2.370	0.000	2285.991	-15.500	0.000
52.	380.106	8.090	0.000	1751.631	-2.740	0.000	2274.143	-17.630	0.000
53.	389.976	8.900	0.000	1750.073	-3.100	0.000	2260.746	-19.610	0.000
54.	349.697	9.610	0.000	1748.330	-3.440	0.000	2246.064	-21.430	0.000
55.	358.149	10.210	0.000	1746.406	-3.770	0.000	2230.069	-23.060	0.000
56.	344.1230	10.710	0.000	1744.317	-4.080	0.000	2212.932	-24.560	0.000
57.	3652.839	11.120	0.000	1742.066	-4.380	0.000	2194.774	-25.930	0.000
58.	3464.880	11.430	0.000	1739.665	-4.650	0.000	2175.716	-27.140	0.000
59.	3477.254	11.660	0.000	1737.127	-4.910	0.000	2155.875	-28.220	0.000
60.	3469.891	11.800	0.000	1734.462	-5.140	0.000	2135.366	-29.170	0.000
61.	3502.693	11.860	0.000	1731.683	-5.350	0.000	2114.301	-30.000	0.000
62.	3515.590	11.850	0.000	1728.803	-5.540	0.000	2092.786	-30.720	0.000
63.	3528.509	11.640	0.000	1725.835	-5.700	0.000	2070.931	-31.320	0.000
64.	3541.386	11.730	0.000	1722.795	-5.830	0.000	2048.632	-31.620	0.000
65.	3554.161	11.570	0.000	1719.695	-5.940	0.000	2026.591	-32.210	0.000
66.	3566.778	11.370	0.000	1716.551	-6.020	0.000	2004.302	-32.500	0.000
67.	3579.186	11.130	0.000	1713.376	-6.070	0.000	1982.856	-32.660	0.000
68.	3591.339	10.850	0.000	1710.192	-6.100	0.000	1959.952	-32.760	0.000
69.	3603.194	10.530	0.000	1707.007	-6.090	0.000	1936.071	-32.730	0.000
70.	3614.712	10.190	0.000	1703.840	-6.050	0.000	1916.503	-32.590	0.000
71.	3625.858	9.810	0.000	1700.705	-5.990	0.000	1895.333	-32.340	0.000
72.	3636.598	9.420	0.000	1697.619	-5.890	0.000	1874.643	-31.970	0.000
73.	3646.903	9.000	0.000	1694.597	-5.760	0.000	1854.516	-31.400	0.000
74.	3656.746	8.560	0.000	1691.654	-5.610	0.000	1835.032	-30.860	0.000
75.	3666.181	8.100	0.000	1688.805	-5.420	0.000	1816.266	-30.100	0.000
76.	3674.946	7.620	0.000	1686.063	-5.210	0.000	1796.301	-29.200	0.000
77.	3683.265	7.130	0.000	1683.444	-4.970	0.000	1781.204	-28.120	0.000
78.	3691.034	6.630	0.000	1680.960	-4.700	0.000	1765.049	-26.450	0.000
79.	3698.238	6.120	0.000	1678.624	-4.410	0.000	1749.984	-25.580	0.000
80.	3704.863	5.590	0.000	1676.448	-4.090	0.000	1735.834	-24.040	0.000
81.	3710.895	5.060	0.000	1674.444	-3.750	0.000	1722.501	-22.320	0.000
82.	3716.322	4.510	0.000	1672.621	-3.390	0.000	1711.163	-20.430	0.000
83.	3721.135	3.970	0.000	1670.990	-3.010	0.000	1700.673	-18.360	0.000
84.	3725.323	3.410	0.000	1669.559	-2.610	0.000	1691.478	-16.120	0.000
85.	3729.880	2.850	0.000	1668.334	-2.200	0.000	1683.623	-13.720	0.000
86.	3731.799	2.260	0.000	1667.324	-1.780	0.000	1677.143	-11.170	0.000
87.	3734.074	1.720	0.000	1666.532	-1.340	0.000	1672.071	-8.500	0.000
88.	3735.702	1.150	0.000	1665.963	-0.900	0.000	1666.430	-5.720	0.000
89.	3736.680	0.570	0.000	1665.621	-0.450	0.000	1666.239	-2.680	0.000
90.	3737.806	-0.000	0.000	1665.507	0.000	0.000	1665.507	0.000	0.000
91.	3738.680	-0.570	0.000	1665.621	0.450	0.000	1666.239	2.680	0.000
92.	3739.702	-1.150	0.000	1665.963	0.900	0.000	1668.430	5.720	0.000
93.	3734.074	-1.720	0.000	1666.532	1.340	0.000	1672.071	8.500	0.000
94.	3731.799	-2.260	0.000	1667.324	1.780	0.000	1677.143	11.170	0.000
95.	3729.880	-2.850	0.000	1668.334	2.200	0.000	1683.623	13.720	0.000
96.	3725.323	-3.410	0.000	1669.559	2.610	0.000	1691.478	16.120	0.000
97.	3721.135	-3.970	0.000	1670.990	3.010	0.000	1691.478	16.120	0.000
98.	3716.322	-4.510	0.000	1672.621	3.390	0.000	1700.673	18.360	0.000
99.	3710.895	-5.060	0.000	1674.444	3.750	0.000	1711.163	20.430	0.000
							1722.501	22.320	0.000

Z-PLANE (XY-PLANE) BISMUTH GERMANIUM OXIDE (KRAUT ET AL)

BULK

	LNGL	LPMI12	LPMI13	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	3784.863	-5.590	0.000	1676.448	4.090	0.000	1735.834	0.000
101.	3698.236	-6.120	0.000	1678.624	4.410	0.000	1749.904	0.000
102.	3691.034	-6.630	0.000	1680.960	4.700	0.000	1765.044	0.000
103.	3683.265	-7.130	0.000	1683.444	4.970	0.000	1781.284	0.000
104.	3674.946	-7.620	0.000	1686.063	5.210	0.000	1798.301	0.000
105.	3666.101	-8.100	0.000	1688.805	5.420	0.000	1816.268	0.000
106.	3656.746	-8.560	0.000	1691.654	5.610	0.000	1835.032	0.000
107.	3646.903	-9.000	0.000	1694.597	5.760	0.000	1854.516	0.000
108.	3636.598	-9.420	0.000	1697.615	5.890	0.000	1874.643	0.000
109.	3625.858	-9.810	0.000	1700.705	5.990	0.000	1895.333	0.000
110.	3614.712	-10.190	0.000	1703.840	6.050	0.000	1916.593	0.000
111.	3603.194	-10.530	0.000	1707.007	6.090	0.000	1938.071	0.000
112.	3591.339	-10.850	0.000	1710.192	6.100	0.000	1959.952	0.000
113.	3579.186	-11.130	0.000	1713.378	6.070	0.000	1982.058	0.000
114.	3566.776	-11.370	0.000	1716.551	6.020	0.000	2004.302	0.000
115.	3554.161	-11.570	0.000	1719.695	5.940	0.000	2026.591	0.000
116.	3541.386	-11.730	0.000	1722.795	5.830	0.000	2048.632	0.000
117.	3528.509	-11.840	0.000	1725.835	5.700	0.000	2070.931	0.000
118.	3515.590	-11.950	0.000	1728.803	5.540	0.000	2092.788	0.000
119.	3502.693	-12.000	0.000	1731.683	5.350	0.000	2114.301	0.000
120.	3489.891	-12.000	0.000	1734.462	5.140	0.000	2135.366	0.000
121.	3477.259	-12.000	0.000	1737.127	4.910	0.000	2155.675	0.000
122.	3464.880	-12.000	0.000	1739.665	4.650	0.000	2175.716	0.000
123.	3452.635	-12.120	0.000	1742.066	4.380	0.000	2194.774	0.000
124.	3441.230	-12.170	0.000	1744.317	4.080	0.000	2212.932	0.000
125.	3430.149	-12.210	0.000	1746.406	3.770	0.000	2230.069	0.000
126.	3419.697	-12.210	0.000	1748.330	3.440	0.000	2246.064	0.000
127.	3409.976	-12.210	0.000	1750.073	3.100	0.000	2260.796	0.000
128.	3401.088	-12.210	0.000	1751.631	2.740	0.000	2274.153	0.000
129.	3393.136	-12.210	0.000	1752.996	2.370	0.000	2286.231	0.000
130.	3386.216	-12.210	0.000	1754.161	1.990	0.000	2296.230	0.000
131.	3380.416	-12.210	0.000	1755.122	1.600	0.000	2304.760	0.000
132.	3375.816	-12.210	0.000	1755.873	1.210	0.000	2311.492	0.000
133.	3372.481	-12.210	0.000	1756.413	.810	0.000	2316.355	0.000
134.	3370.460	-12.210	0.000	1756.737	.400	0.000	2319.295	0.000
135.	3369.783	-12.210	0.000	1756.846	-0.000	0.000	2320.279	0.000
136.	3370.460	-12.210	0.000	1756.737	-4.000	0.000	2319.295	0.000
137.	3372.481	-12.210	0.000	1756.413	-8.010	0.000	2316.355	0.000
138.	3375.816	-12.210	0.000	1755.873	-12.210	0.000	2311.492	0.000
139.	3380.416	-12.210	0.000	1755.122	-1.600	0.000	2304.760	0.000
140.	3386.216	-12.210	0.000	1754.161	-1.990	0.000	2296.230	0.000
141.	3393.136	-12.210	0.000	1752.996	-2.370	0.000	2286.231	0.000
142.	3401.088	-12.210	0.000	1751.631	-2.740	0.000	2274.153	0.000
143.	3409.976	-12.210	0.000	1750.073	-3.100	0.000	2260.796	0.000
144.	3419.697	-12.210	0.000	1748.330	-3.440	0.000	2246.064	0.000
145.	3430.149	-12.210	0.000	1746.406	-3.770	0.000	2230.069	0.000
146.	3441.230	-12.210	0.000	1744.317	-4.080	0.000	2212.932	0.000
147.	3452.635	-12.210	0.000	1742.066	-4.380	0.000	2194.774	0.000
148.	3464.880	-12.210	0.000	1739.665	-4.650	0.000	2175.716	0.000
149.	3477.259	-12.210	0.000	1737.127	-4.910	0.000	2155.675	0.000

Z-PLANE (XY-PLANE) BISMUTH GERMANIUM OXIDE (KRAUT ET AL)										BULK	
	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSPH12	SSPH13				
150.	3409.891	0.000	1734.462	-5.140	0.000	2335.366	0.000				
151.	3502.693	0.000	1731.683	-5.350	0.000	2114.381	0.000				
152.	3515.550	0.000	1728.803	-5.540	0.000	2092.788	0.000				
153.	3528.509	0.000	1725.835	-5.780	0.000	2070.931	0.000				
154.	3541.386	0.000	1722.795	-5.830	0.000	2048.832	0.000				
155.	3554.161	0.000	1719.695	-5.940	0.000	2026.591	0.000				
156.	3566.778	0.000	1716.551	-6.020	0.000	2004.302	0.000				
157.	3579.186	0.000	1713.378	-6.070	0.000	1982.058	0.000				
158.	3591.339	0.000	1710.192	-6.100	0.000	1959.952	0.000				
159.	3603.194	0.000	1707.007	-6.090	0.000	1938.071	0.000				
160.	3614.712	0.000	1703.840	-6.050	0.000	1916.503	0.000				
161.	3625.858	0.000	1700.705	-5.990	0.000	1895.333	0.000				
162.	3636.598	0.000	1697.519	-5.890	0.000	1874.643	0.000				
163.	3646.903	0.000	1694.597	-5.760	0.000	1854.516	0.000				
164.	3656.746	0.000	1691.654	-5.610	0.000	1835.032	0.000				
165.	3666.101	0.000	1688.805	-5.420	0.000	1816.268	0.000				
166.	3674.948	0.000	1686.063	-5.210	0.000	1798.381	0.000				
167.	3683.265	0.000	1683.444	-4.970	0.000	1781.234	0.000				
168.	3691.034	0.000	1680.960	-4.700	0.000	1765.045	0.000				
169.	3698.236	0.000	1678.624	-4.410	0.000	1749.904	0.000				
170.	3704.863	0.000	1676.448	-4.090	0.000	1735.834	0.000				
171.	3710.895	0.000	1674.444	-3.750	0.000	1722.901	0.000				
172.	3716.322	0.000	1672.621	-3.390	0.000	1711.163	0.000				
173.	3721.135	0.000	1670.990	-3.010	0.000	1700.673	0.000				
174.	3725.323	0.000	1669.559	-2.610	0.000	1691.478	0.000				
175.	3728.880	0.000	1668.334	-2.200	0.000	1683.623	0.000				
176.	3731.799	0.000	1667.324	-1.780	0.000	1677.143	0.000				
177.	3734.074	0.000	1666.532	-1.340	0.000	1672.071	0.000				
178.	3735.702	0.000	1665.963	-0.900	0.000	1668.430	0.000				
179.	3736.680	0.000	1665.621	-0.450	0.000	1666.239	0.000				
180.	3737.006	0.000	1665.507	0.000	0.000	1665.507	0.000				

111-PLANE BISMUTH GERMANIUM OXIDE (KRAUT ET AL.)

BULK

	LNQVEL	LPWH12	LPWH13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	3369.783	0.000	0.000	2320.279	-0.000	0.000	1756.846	-0.000	0.000
1.	3369.946	.320	-7.710	2319.837	-1.250	1.000	1757.116	1.010	1.000
2.	3370.434	.630	-1.410	2318.514	-2.500	2.160	1757.926	3.016	2.400
3.	3371.240	.940	-2.110	2316.318	-3.720	3.230	1759.274	4.000	3.720
4.	3372.353	1.230	-2.790	2313.266	-4.920	4.260	1761.155	4.960	4.930
5.	3373.756	1.500	-3.460	2309.379	-6.000	5.300	1763.565	5.910	5.800
6.	3375.435	1.760	-4.100	2304.684	-7.210	6.300	1766.497	6.820	6.810
7.	3377.362	1.990	-4.730	2299.212	-8.290	7.270	1769.941	7.710	7.720
8.	3379.513	2.150	-5.330	2293.000	-9.320	8.210	1773.087	8.570	8.600
9.	3381.862	2.360	-5.900	2286.091	-10.290	9.100	1776.323	9.390	9.450
10.	3384.378	2.510	-6.440	2278.530	-11.200	9.960	1783.233	10.150	10.270
11.	3387.031	2.620	-6.960	2270.367	-12.030	10.770	1788.601	10.870	11.060
12.	3389.788	2.710	-7.440	2261.655	-12.600	11.540	1794.406	11.540	11.820
13.	3392.616	2.760	-7.890	2252.452	-13.490	12.260	1800.626	12.150	12.500
14.	3395.484	2.760	-8.310	2242.816	-14.090	12.930	1807.233	12.690	13.230
15.	3398.360	2.770	-8.700	2232.819	-14.610	13.560	1814.195	13.150	13.800
16.	3401.211	2.730	-9.060	2222.525	-15.030	14.150	1821.477	13.530	14.200
17.	3404.009	2.660	-9.400	2212.010	-15.350	14.680	1828.037	13.810	14.450
18.	3406.722	2.560	-9.700	2201.355	-15.560	15.170	1836.822	14.000	14.600
19.	3409.325	2.440	-9.970	2190.650	-15.630	15.610	1844.774	14.100	14.650
20.	3411.791	2.300	-10.220	2179.993	-15.560	16.000	1852.821	14.010	14.500
21.	3414.097	2.130	-10.440	2169.497	-15.320	16.350	1860.876	13.880	14.300
22.	3416.220	1.950	-10.630	2159.290	-14.860	16.660	1868.836	13.670	14.000
23.	3418.140	1.740	-10.800	2149.516	-14.210	16.910	1876.513	13.330	13.600
24.	3419.841	1.520	-10.950	2140.352	-13.250	17.130	1883.937	12.820	13.100
25.	3421.306	1.290	-11.070	2131.991	-11.970	17.300	1891.745	12.200	12.500
26.	3422.523	1.040	-11.170	2124.855	-10.310	17.440	1898.791	11.500	11.800
27.	3423.460	.790	-11.240	2118.566	-8.240	17.530	1901.644	10.700	11.000
28.	3424.170	.530	-11.300	2114.026	-5.770	17.600	1905.673	9.800	10.200
29.	3424.587	.270	-11.330	2111.189	-2.980	17.630	1908.066	8.800	9.500
30.	3424.726	0.000	-11.340	2110.225	-0.000	17.650	1908.845	-0.000	8.500
31.	3424.587	-270	-11.330	2111.189	2.460	17.630	1908.066	-2.700	8.200
32.	3424.170	-530	-11.300	2114.026	5.770	17.600	1905.673	-5.400	7.800
33.	3423.460	-790	-11.240	2118.566	8.240	17.530	1901.644	-7.600	7.300
34.	3422.523	-1040	-11.170	2124.855	10.310	17.440	1898.791	-9.500	6.800
35.	3421.306	-1290	-11.070	2131.991	11.970	17.300	1891.745	-11.000	6.200
36.	3419.841	-1520	-10.950	2140.352	13.250	17.130	1883.937	-12.220	5.400
37.	3418.140	-1740	-10.800	2149.516	14.210	16.910	1876.513	-13.030	4.500
38.	3416.220	-1950	-10.630	2159.290	14.880	16.660	1868.836	-13.570	3.600
39.	3414.097	-2130	-10.440	2169.497	15.320	16.350	1860.876	-13.800	2.600
40.	3411.791	-2300	-10.220	2179.993	15.560	16.000	1852.821	-14.010	1.600
41.	3409.325	-2440	-9.970	2190.650	15.630	15.610	1844.774	-13.970	0.600
42.	3406.722	-2560	-9.700	2201.355	15.560	15.170	1836.822	-13.610	-0.400
43.	3404.009	-2660	-9.400	2212.010	15.350	14.680	1828.037	-13.150	-1.400
44.	3401.212	-2730	-9.060	2222.525	15.030	14.150	1821.477	-12.690	-2.400
45.	3398.360	-2770	-8.700	2232.819	14.610	13.560	1814.195	-12.150	-3.400
46.	3395.485	-2760	-8.310	2242.816	14.090	12.930	1807.233	-11.540	-4.400
47.	3392.616	-2710	-7.890	2252.452	13.490	12.260	1800.626	-10.870	-5.400
48.	3389.788	-2620	-7.440	2261.655	12.600	11.540	1794.406	-10.150	-6.400
49.	3387.031	-2440	-6.960	2270.367	12.030	10.770	1788.601	-9.390	-7.400

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	LNVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
50.	3384.378	-2.510	-6.443	2278.530	11.200	9.960	1783.233	-9.380	9.450
51.	3381.862	-2.360	-5.900	2286.091	10.290	9.100	1776.323	-8.570	8.600
52.	3379.513	-2.150	-5.330	2293.000	9.320	6.210	1773.007	-7.710	7.720
53.	3377.362	-1.990	-4.730	2299.211	6.290	7.270	1769.941	-6.620	6.610
54.	3375.435	-1.760	-4.100	2304.683	7.210	6.300	1766.497	-5.510	5.600
55.	3373.756	-1.500	-3.460	2309.379	6.080	5.300	1763.565	-4.960	4.930
56.	3372.353	-1.230	-2.790	2313.266	4.920	4.220	1761.155	-4.000	3.970
57.	3371.240	-940	-2.110	2316.316	3.720	3.230	1759.274	-3.010	2.970
58.	3370.434	-630	-1.410	2318.514	2.500	2.160	1757.926	-2.010	2.000
59.	3369.946	-320	-710	2319.837	1.250	1.080	1757.116	-1.010	1.000
60.	3369.783	-8.008	-0.000	2320.279	0.000	0.000	1756.846	0.000	0.000
61.	3369.946	.320	.710	2319.837	-1.250	-1.060	1757.116	1.010	1.000
62.	3370.434	.630	1.410	2318.514	-2.500	-2.160	1757.926	2.010	2.000
63.	3371.240	.940	2.110	2316.316	-3.720	-3.230	1759.274	3.010	2.990
64.	3372.353	1.230	2.790	2313.266	-4.920	-4.280	1761.155	4.000	3.970
65.	3373.756	1.500	3.460	2309.379	-6.080	-5.300	1763.565	4.960	4.930
66.	3375.435	1.760	4.100	2304.684	-7.210	-6.300	1766.497	5.510	5.600
67.	3377.362	1.990	4.730	2299.212	-8.290	-7.270	1769.941	6.620	6.610
68.	3379.513	2.150	5.330	2293.000	-9.320	-8.210	1773.007	7.710	7.720
69.	3381.862	2.360	5.900	2286.091	-10.290	-9.100	1776.323	8.570	8.600
70.	3384.378	2.510	6.440	2278.530	-11.200	-9.960	1783.234	9.380	9.450
71.	3387.031	2.620	6.960	2270.367	-12.030	-10.770	1786.601	10.120	10.210
72.	3389.786	2.710	7.440	2261.655	-12.800	-11.540	1794.407	10.870	11.000
73.	3392.616	2.760	7.890	2252.452	-13.490	-12.260	1800.626	11.540	11.820
74.	3395.464	2.770	8.310	2242.818	-14.090	-12.930	1807.233	12.150	12.540
75.	3398.360	2.770	8.700	2232.819	-14.610	-13.560	1814.195	12.690	13.230
76.	3401.211	2.730	9.060	2222.525	-15.030	-14.140	1821.178	13.150	13.600
77.	3404.006	2.660	9.400	2212.010	-15.350	-14.680	1828.037	13.530	14.000
78.	3406.722	2.560	9.700	2201.355	-15.560	-15.170	1836.022	13.840	14.350
79.	3409.325	2.440	9.970	2190.650	-15.630	-15.610	1844.774	14.090	14.600
80.	3411.791	2.300	10.220	2179.994	-15.560	-16.000	1852.021	14.010	14.600
81.	3414.097	2.130	10.440	2169.496	-15.320	-16.350	1860.076	13.880	14.550
82.	3416.220	1.950	10.630	2159.290	-14.680	-16.660	1868.036	13.570	14.900
83.	3418.140	1.740	10.800	2149.516	-14.210	-16.910	1876.533	13.030	15.200
84.	3419.841	1.520	10.950	2140.353	-13.250	-17.130	1883.937	12.220	15.600
85.	3421.306	1.290	11.070	2131.991	-11.970	-17.300	1890.745	11.060	16.000
86.	3422.523	1.040	11.170	2124.655	-10.310	-17.440	1896.731	9.560	16.200
87.	3423.480	.750	11.240	2118.506	-8.240	-17.530	1901.645	7.660	16.350
88.	3424.170	.530	11.300	2114.026	-5.770	-17.600	1905.673	5.400	16.500
89.	3424.586	.270	11.330	2111.189	-2.980	-17.630	1908.084	2.740	16.630
90.	3424.726	0.000	11.340	2110.225	0.000	-17.650	1908.885	-0.600	16.660
91.	3424.586	-.270	11.330	2111.189	2.980	-17.630	1908.089	-2.790	16.630
92.	3424.170	-.530	11.300	2114.026	5.770	-17.600	1905.673	-5.400	16.500
93.	3423.480	-.750	11.240	2118.506	8.240	-17.530	1901.645	-7.660	16.350
94.	3422.523	-1.040	11.170	2124.655	10.310	-17.440	1896.731	-9.560	16.200
95.	3421.306	-1.290	11.070	2131.991	11.970	-17.300	1890.745	-11.060	16.000
96.	3419.841	-1.520	10.950	2140.353	13.250	-17.130	1883.937	-12.220	15.600
97.	3418.140	-1.740	10.800	2149.516	14.210	-16.910	1876.533	-13.030	15.200
98.	3416.220	-1.950	10.630	2159.290	14.680	-16.660	1868.036	-13.570	14.900
99.	3414.097	-2.130	10.440	2169.496	15.320	-16.350	1860.076	-13.880	14.550

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BULK

	LANGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
100.	3411.791	-2.300	10.220	2179.994	15.560	-16.000	1652.821	-14.010	-16.090
101.	3409.325	-2.440	9.970	2190.650	15.630	-15.610	1644.774	-13.970	-15.800
102.	3406.722	-2.560	9.700	2201.355	15.560	-15.170	1636.622	-13.610	-15.000
103.	3404.008	-2.660	9.400	2212.010	15.350	-14.680	1629.037	-13.530	-14.490
104.	3401.211	-2.730	9.060	2222.525	15.030	-14.140	1621.476	-13.450	-13.600
105.	3398.360	-2.770	8.700	2232.819	14.610	-13.560	1614.195	-12.690	-13.230
106.	3395.484	-2.780	8.310	2242.818	14.090	-12.930	1607.233	-12.150	-12.540
107.	3392.616	-2.760	7.890	2252.452	13.440	-12.260	1600.626	-11.820	-11.820
108.	3389.788	-2.710	7.440	2261.655	12.680	-11.540	1594.407	-10.670	-11.000
109.	3387.031	-2.620	6.960	2270.367	12.030	-10.770	1588.691	-10.150	-10.270
110.	3384.376	-2.510	6.440	2278.530	11.200	-9.960	1583.234	-9.360	-9.450
111.	3381.862	-2.360	5.900	2286.091	10.290	-9.100	1578.023	-8.570	-8.650
112.	3379.513	-2.190	5.330	2293.000	9.320	-8.210	1573.067	-7.710	-7.720
113.	3377.362	-1.990	4.730	2299.212	8.290	-7.270	1568.491	-6.820	-6.810
114.	3375.435	-1.760	4.100	2304.684	7.210	-6.300	1564.27	-5.910	-5.800
115.	3373.758	-1.500	3.460	2309.379	6.060	-5.300	1560.466	-4.960	-4.930
116.	3372.353	-1.230	2.790	2313.266	4.920	-4.260	1557.116	-4.000	-3.970
117.	3371.240	-940	2.110	2316.318	3.720	-3.230	1554.274	-3.010	-2.950
118.	3370.434	-630	1.410	2318.514	2.500	-2.160	1551.926	-2.020	-2.000
119.	3369.946	-320	710	2319.837	1.250	-0.000	1550.000	-0.000	-0.000
120.	3369.763	0.000	-0.000	2320.274	-0.000	0.000	1548.646	0.000	0.000
121.	3369.966	.320	-7.710	2319.837	-1.250	1.060	1547.116	1.010	1.010
122.	3370.434	.630	-1.410	2318.514	-2.500	2.160	1546.466	2.010	2.000
123.	3371.240	.940	-2.110	2316.318	-3.720	3.230	1545.274	3.010	3.000
124.	3372.353	1.230	-2.790	2313.266	-4.920	4.260	1544.155	4.000	3.970
125.	3373.756	1.500	-3.460	2309.379	-6.060	5.300	1543.065	4.960	4.930
126.	3375.435	1.760	-4.100	2304.683	-7.210	6.300	1542.000	5.910	5.800
127.	3377.362	1.990	-4.730	2299.211	-8.290	7.270	1541.067	6.820	6.810
128.	3379.513	2.190	-5.330	2293.000	-9.320	8.210	1540.27	7.710	7.720
129.	3381.862	2.360	-5.900	2286.091	-10.290	9.100	1539.541	8.570	8.560
130.	3384.378	2.510	-6.440	2278.530	-11.200	9.960	1538.891	9.360	9.450
131.	3387.031	2.620	-6.960	2270.367	-12.030	10.770	1538.323	10.150	10.270
132.	3389.788	2.710	-7.440	2261.655	-12.800	11.540	1537.822	10.870	11.000
133.	3392.616	2.760	-7.890	2252.452	-13.440	12.260	1537.406	11.620	11.820
134.	3395.485	2.780	-8.310	2242.818	-14.090	12.930	1537.026	12.340	12.540
135.	3398.360	2.770	-8.700	2232.819	-14.610	13.560	1536.681	13.030	13.230
136.	3401.212	2.730	-9.060	2222.525	-15.030	14.150	1536.374	13.690	13.890
137.	3404.009	2.660	-9.400	2212.010	-15.350	14.660	1536.107	14.330	14.530
138.	3406.722	2.560	-9.700	2201.355	-15.560	15.170	1535.882	14.970	15.170
139.	3409.325	2.440	-9.970	2190.650	-15.630	15.610	1535.691	15.600	15.800
140.	3411.791	2.300	-10.220	2179.993	-15.560	16.000	1535.541	16.240	16.440
141.	3414.097	2.130	-10.440	2169.497	-15.320	16.350	1535.426	16.820	17.020
142.	3416.820	1.950	-10.630	2159.290	-14.860	16.660	1535.341	17.340	17.540
143.	3419.140	1.740	-10.800	2149.518	-14.210	16.940	1535.293	17.800	18.000
144.	3421.841	1.520	-10.950	2140.352	-13.250	17.130	1535.274	18.200	18.400
145.	3424.806	1.290	-11.070	2131.991	-11.970	17.300	1535.285	18.540	18.740
146.	3427.923	1.040	-11.170	2124.655	-10.310	17.440	1535.316	18.820	19.020
147.	3431.170	.790	-11.240	2118.586	-8.240	17.530	1535.364	19.040	19.240
148.	3434.640	.530	-11.300	2114.026	-5.770	17.600	1535.423	19.190	19.390
149.	3438.457	.270	-11.330	2111.169	-2.960	17.630	1535.496	19.290	19.490

111-PLANE BISMUTH GERMANIUM OXIDE (KRAUT ET AL)

BULK

	LNGLVL	LPN12	LPN13	FSRVEL	FSPN12	FSPN13	SSRVEL	SSPN12	SSPN13
150.	3624.726	-0.000	-11.340	2110.225	0.000	17.050	1908.085	0.000	16.666
151.	3624.587	-0.270	-11.330	2111.109	2.960	17.630	1908.068	-2.790	16.630
152.	3624.170	-0.530	-11.300	2114.026	5.770	17.600	1905.673	-5.400	16.540
153.	3623.460	-0.790	-11.240	2118.586	8.240	17.530	1901.844	-7.680	16.350
154.	3622.523	-1.040	-11.170	2124.655	10.310	17.440	1896.791	-9.580	16.200
155.	3621.306	-1.290	-11.070	2131.911	11.970	17.300	1890.745	-11.060	17.920
156.	3619.841	-1.520	-10.950	2140.382	13.250	17.330	1883.937	-12.220	17.670
157.	3618.140	-1.740	-10.800	2149.516	14.210	16.910	1876.573	-13.030	17.330
158.	3616.220	-1.950	-10.630	2159.290	14.860	16.660	1868.636	-13.570	16.900
159.	3614.097	-2.130	-10.440	2169.497	15.320	16.350	1860.876	-13.680	16.550
160.	3611.791	-2.300	-10.220	2179.993	15.560	16.000	1852.821	-14.010	16.090
161.	3609.325	-2.440	-9.970	2190.650	15.630	15.610	1844.774	-13.570	15.600
162.	3606.722	-2.560	-9.700	2201.355	15.560	15.170	1836.622	-13.410	15.060
163.	3604.009	-2.660	-9.400	2212.010	15.350	14.660	1828.037	-13.530	14.730
164.	3601.211	-2.730	-9.060	2222.525	15.030	14.150	1821.477	-13.150	13.880
165.	3598.360	-2.770	-8.700	2232.819	14.610	13.560	1814.195	-12.690	13.230
166.	3595.404	-2.760	-8.310	2242.818	14.090	12.930	1807.233	-12.150	12.540
167.	3592.616	-2.760	-7.890	2252.452	13.490	12.260	1800.626	-11.540	11.820
168.	3589.786	-2.710	-7.460	2261.655	12.800	11.540	1794.406	-10.870	11.060
169.	3587.031	-2.620	-6.980	2270.367	12.030	10.770	1788.601	-10.150	10.270
170.	3584.378	-2.510	-6.440	2278.530	11.200	9.960	1783.233	-9.360	9.450
171.	3581.862	-2.360	-5.900	2286.091	10.250	9.100	1778.323	-8.570	8.600
172.	3579.513	-2.190	-5.330	2293.000	9.320	8.210	1773.887	-7.710	7.720
173.	3577.362	-1.990	-4.730	2299.212	8.290	7.270	1769.941	-6.820	6.810
174.	3575.435	-1.760	-4.100	2304.684	7.210	6.300	1766.497	-5.910	5.860
175.	3573.756	-1.500	-3.460	2309.379	6.090	5.300	1763.565	-4.960	4.930
176.	3572.353	-1.230	-2.790	2313.266	4.920	4.260	1761.155	-4.000	3.970
177.	3571.240	-0.940	-2.110	2316.318	3.720	3.830	1759.274	-3.010	2.990
178.	3570.434	-0.630	-1.410	2318.514	2.500	2.160	1757.926	-2.020	2.000
179.	3569.946	-0.320	-0.710	2319.837	1.250	1.060	1757.116	-1.010	1.000
180.	3569.783	0.000	0.000	2320.279	-0.000	-0.000	1756.846	0.000	-0.000

110-PLANE BISMUTH GERMANIUM OXIDE (KRAUT ET AL)									
	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13	
0.	-0.000	0.000	2124.559	15.250	0.000	2124.567	-15.250	-0.000	
1.	0.530	-0.000	2134.234	13.920	0.000	2114.376	-15.560	-0.000	
2.	3302.945	-0.000	2142.996	12.490	0.000	2104.022	-15.860	-0.000	
3.	3304.361	-0.000	2150.783	10.970	0.000	2093.515	-16.150	-0.000	
4.	3306.410	-0.000	2157.525	9.350	0.000	2082.867	-16.420	-0.000	
5.	3309.125	-0.000	2163.169	7.660	0.000	2072.007	-16.690	-0.000	
6.	3312.533	-0.000	2167.666	5.900	0.000	2061.186	-16.940	-0.000	
7.	3316.654	-0.000	2170.974	4.080	0.000	2050.180	-17.170	-0.000	
8.	3321.501	-0.000	2173.061	2.220	-0.000	2039.076	-17.350	-0.000	
9.	3327.080	-0.000	2173.904	.330	0.000	2027.887	-17.600	-0.000	
10.	3333.390	-0.000	2173.490	-1.560	0.000	2016.626	-17.790	-0.000	
11.	3340.419	-0.000	2171.817	-3.460	0.000	2005.305	-17.560	0.000	
12.	3348.151	-0.000	2168.085	-5.360	0.000	1993.936	-16.121	-0.000	
13.	3356.561	-0.000	2164.725	-7.200	0.000	1982.537	-18.250	-0.000	
14.	3365.617	-0.000	2159.347	-9.010	0.000	1971.116	-18.370	-0.000	
15.	3375.201	-0.000	2152.789	-10.750	0.000	1959.609	-18.470	-0.000	
16.	3385.511	-0.000	2145.090	-12.430	0.000	1948.269	-16.550	-0.000	
17.	3396.260	-0.000	2136.299	-14.040	0.000	1936.871	-16.610	-0.000	
18.	3407.478	-0.000	2126.466	-15.560	0.000	1925.509	-16.640	-0.000	
19.	3419.111	-0.000	2115.650	-17.000	0.000	1914.197	-16.660	-0.000	
20.	3431.105	-0.000	2103.911	-18.350	0.000	1902.952	-16.650	-0.000	
21.	3443.405	-0.000	2091.315	-19.610	0.000	1891.766	-16.610	-0.000	
22.	3455.954	-0.000	2077.928	-20.780	0.000	1880.716	-16.550	-0.000	
23.	3468.697	-0.000	2063.821	-21.650	0.000	1869.756	-16.470	0.000	
24.	3481.580	-0.000	2049.063	-22.630	0.000	1858.925	-16.350	-0.000	
25.	3494.549	-0.000	2033.729	-23.720	0.000	1848.235	-16.210	-0.000	
26.	3507.552	-0.000	2017.891	-24.820	0.000	1837.702	-18.040	-0.000	
27.	3520.539	-0.000	2001.623	-25.920	0.000	1827.342	-17.650	0.000	
28.	3533.462	-0.000	1985.031	-26.840	0.000	1817.172	-17.620	-0.000	
29.	3546.273	-0.000	1968.100	-26.350	0.000	1807.205	-17.360	-0.000	
30.	3558.930	-0.000	1950.995	-26.760	0.000	1797.459	-17.670	-0.000	
31.	3571.390	-0.000	1933.761	-27.100	0.000	1787.949	-16.740	0.000	
32.	3583.612	-0.000	1916.474	-27.330	0.000	1778.690	-16.390	-0.000	
33.	3595.560	-0.000	1899.211	-27.460	0.000	1769.696	-16.000	-0.000	
34.	3607.199	-0.000	1882.045	-27.490	0.000	1760.987	-15.570	0.000	
35.	3618.493	-0.000	1865.054	-27.410	0.000	1752.573	-15.110	-0.000	
36.	3629.413	-0.000	1848.311	-27.220	0.000	1744.470	-14.620	-0.000	
37.	3639.929	-0.000	1831.890	-26.920	0.000	1736.693	-14.090	-0.000	
38.	3650.012	-0.000	1815.866	-26.500	0.000	1729.255	-13.530	-0.000	
39.	3659.636	-0.000	1800.310	-25.960	0.000	1722.170	-12.940	-0.000	
40.	3668.783	-0.000	1785.295	-25.290	0.000	1715.451	-12.310	-0.000	
41.	3677.425	-0.000	1770.890	-24.490	0.000	1709.110	-11.640	-0.000	
42.	3685.543	-0.000	1757.162	-23.550	0.000	1703.160	-10.950	-0.000	
43.	3693.118	-0.000	1744.179	-22.470	0.000	1697.612	-10.220	-0.000	
44.	3700.134	-0.000	1732.002	-21.250	0.000	1692.477	-9.470	-0.000	
45.	3706.576	-0.000	1720.693	-19.870	0.000	1687.764	-8.660	-0.000	
46.	3712.428	-0.000	1710.308	-18.360	0.000	1683.483	-7.670	-0.000	
47.	3717.678	-0.000	1700.899	-16.690	0.000	1679.643	-7.030	-0.000	
48.	3722.316	-0.000	1692.517	-14.890	0.000	1676.251	-6.170	-0.000	
49.	3726.332	-0.000	1685.204	-12.950	0.000	1673.315	-5.300	-0.000	

BULK

110-PLANE BISMUTH GERMANIUM OXIDE (KRAUT ET AL)

BULK

	LPHI12	LPHI13	FSRVEL	FSRPH12	FSPH13	SSRVEL	SSRPH12	SSPH13
50.	3729.716	-0.000	1678.999	-10.890	0.000	1670.839	-4.400	-0.000
51.	3732.763	-0.000	1673.935	-8.720	0.000	1668.830	-3.490	-0.000
52.	3736.567	-0.000	1670.040	-6.466	0.000	1667.291	-2.560	-0.000
53.	3736.024	-0.000	1667.336	-4.140	0.000	1666.226	-1.630	-0.000
54.	3736.830	-0.000	1665.836	-1.760	0.000	1665.636	-0.690	0.000
55.	3736.984	-0.000	1665.523	.250	0.000	1665.549	.250	0.000
56.	3736.485	-0.000	1666.777	3.020	-0.000	1665.886	1.130	0.000
57.	3733.336	-0.000	1668.614	5.370	0.000	1666.729	2.120	0.000
58.	3733.537	-0.000	1671.950	7.670	-0.000	1666.045	3.050	0.000
59.	3731.093	-0.000	1676.465	9.600	0.000	1665.032	3.970	0.000
60.	3728.006	-0.000	1682.135	12.000	0.000	1672.088	4.870	0.000
61.	3724.289	-0.000	1688.925	13.950	-0.000	1674.008	5.760	0.000
62.	3719.944	-0.000	1696.812	15.860	-0.000	1677.966	6.630	0.000
63.	3714.982	-0.000	1705.742	17.590	-0.000	1681.615	7.460	0.000
64.	3709.412	-0.000	1715.673	19.160	-0.000	1685.609	8.300	0.000
65.	3703.247	-0.000	1726.553	20.620	-0.000	1690.195	9.100	0.000
66.	3696.501	-0.000	1738.327	21.910	0.000	1695.136	9.870	0.000
67.	3689.107	-0.000	1750.936	23.060	0.000	1700.491	10.610	0.000
68.	3681.323	-0.000	1764.322	24.060	-0.000	1706.252	11.320	0.000
69.	3672.926	-0.000	1778.416	24.930	-0.000	1712.510	12.000	0.000
70.	3664.016	-0.000	1793.191	25.660	-0.000	1718.952	12.640	0.000
71.	3654.614	-0.000	1808.461	26.260	-0.000	1725.866	13.260	0.000
72.	3644.743	-0.000	1824.273	26.740	-0.000	1733.139	13.830	0.000
73.	3634.428	-0.000	1840.515	27.050	0.000	1740.756	14.360	0.000
74.	3623.696	-0.000	1857.115	27.330	0.000	1748.709	14.890	0.000
75.	3612.575	-0.000	1873.999	27.460	-0.000	1756.978	15.360	0.000
76.	3601.094	-0.000	1891.092	27.490	0.000	1765.550	15.800	0.000
77.	3589.286	-0.000	1908.316	27.410	-0.000	1774.412	16.210	0.000
78.	3577.191	-0.000	1925.603	27.220	-0.000	1783.547	16.560	0.000
79.	3564.836	-0.000	1942.872	26.940	-0.000	1792.940	16.920	0.000
80.	3552.269	-0.000	1960.047	26.560	0.000	1802.577	17.220	0.000
81.	3539.525	-0.000	1977.054	26.050	-0.000	1812.441	17.500	0.000
82.	3526.650	-0.000	1993.817	25.520	0.000	1822.517	17.740	0.000
83.	3513.667	-0.000	2010.262	24.860	-0.000	1832.790	17.950	0.000
84.	3500.686	-0.000	2026.311	24.110	-0.000	1843.243	18.140	0.000
85.	3487.694	-0.000	2041.893	23.270	0.000	1853.861	18.290	0.000
86.	3474.764	-0.000	2056.932	22.330	-0.000	1864.628	18.420	0.000
87.	3461.946	-0.000	2071.355	21.290	-0.000	1875.529	18.520	0.000
88.	3449.300	-0.000	2085.091	20.170	-0.000	1886.548	18.590	0.000
89.	3436.876	-0.000	2098.869	18.950	-0.000	1897.671	18.630	0.000
90.	3424.730	-0.000	2110.220	17.650	-0.000	1908.880	18.660	0.000
91.	3412.920	-0.000	2121.480	16.250	-0.000	1920.163	18.650	0.000
92.	3401.500	-0.000	2131.784	14.770	-0.000	1931.502	18.630	0.000
93.	3390.523	-0.000	2141.074	13.200	-0.000	1942.805	18.580	0.000
94.	3380.042	-0.000	2149.294	11.550	-0.000	1954.297	18.510	0.000
95.	3370.105	-0.000	2156.396	9.840	-0.000	1965.722	18.420	0.000
96.	3360.737	-0.000	2162.336	8.060	-0.000	1977.146	18.310	0.000
97.	3352.036	-0.000	2167.077	6.230	-0.000	1988.560	18.160	0.000
98.	3343.982	-0.000	2170.590	4.370	-0.000	1999.945	18.040	0.000
99.	3336.619	0.000	2172.857	2.470	-0.000	2011.289	17.670	0.000

110-PLANE BISMUTH GERMANIUM OXIDE (KRAUT ET AL)

	LMGVEL	LPM112	LPM113	FSRVEL	FSPM112	FSPM113	SSRVEL	SSPM112	SSPM113
100.	3329.966	-6.160	0.000	2173.066	.570	-0.000	2022.260	17.650	0.000
101.	3324.043	-5.470	0.000	2173.615	-1.338	0.000	2033.804	17.490	0.000
102.	3318.051	-4.760	0.000	2172.112	-3.200	-0.000	2044.950	17.280	0.000
103.	3314.386	-4.050	0.000	2169.376	-5.050	-0.000	2056.005	17.050	0.000
104.	3310.646	-3.350	0.000	2165.436	-6.840	-0.000	2066.957	16.810	0.000
105.	3307.607	-2.670	0.000	2160.329	-8.560	-0.000	2077.794	16.550	0.000
106.	3305.247	-2.020	0.000	2154.099	-10.220	-0.000	2086.506	16.280	0.000
107.	3303.537	-1.390	0.000	2146.798	-11.760	0.000	2094.061	16.000	0.000
108.	3302.441	-.600	0.000	2138.465	-13.260	-0.000	2101.506	15.700	0.000
109.	3301.921	-.250	0.000	2129.235	-14.630	0.000	2117.776	15.390	0.000
110.	3301.933	.260	0.000	2119.107	-15.910	-0.000	2129.879	15.080	0.000
111.	3302.435	.730	0.000	2108.161	-17.070	-0.000	2139.802	14.750	0.000
112.	3303.376	1.140	0.000	2096.531	-18.140	-0.000	2145.536	14.410	0.000
113.	3304.719	1.510	0.000	2084.237	-19.090	-0.000	2151.077	14.060	0.000
114.	3306.409	1.640	0.000	2071.379	-19.940	-0.000	2156.411	13.700	0.000
115.	3308.604	2.120	0.000	2058.035	-20.660	-0.000	2177.530	13.340	0.000
116.	3310.661	2.350	0.000	2044.287	-21.320	-0.000	2186.426	12.960	0.000
117.	3313.136	2.550	0.000	2030.211	-21.660	-0.000	2195.092	12.580	-0.000
118.	3315.790	2.700	0.000	2015.885	-22.290	-0.000	2203.519	12.190	-0.000
119.	3318.586	2.820	0.000	2001.386	-22.630	-0.000	2211.700	11.790	-0.000
120.	3321.486	2.910	0.000	1986.787	-22.870	-0.000	2219.626	11.380	-0.000
121.	3324.463	2.960	0.000	1972.160	-23.010	0.000	2227.296	10.970	-0.000
122.	3327.481	2.990	0.000	1957.575	-23.060	0.000	2234.637	10.550	-0.000
123.	3330.515	2.990	0.000	1943.096	-23.010	-0.000	2241.825	10.130	-0.000
124.	3333.539	2.960	0.000	1928.796	-22.860	-0.000	2246.674	9.700	-0.000
125.	3336.531	2.920	0.000	1914.731	-22.620	0.000	2255.237	9.260	-0.000
126.	3339.471	2.850	0.000	1900.963	-22.290	-0.000	2261.511	8.820	0.000
127.	3342.330	2.770	0.000	1887.551	-21.860	-0.000	2267.489	8.380	0.000
128.	3345.118	2.680	0.000	1874.549	-21.340	-0.000	2273.167	7.930	0.000
129.	3347.794	2.570	0.000	1862.010	-20.720	-0.000	2278.539	7.460	-0.000
130.	3350.356	2.450	0.000	1849.984	-20.000	-0.000	2283.602	7.020	-0.000
131.	3352.790	2.320	0.000	1838.520	-19.150	-0.000	2288.351	6.580	-0.000
132.	3355.087	2.180	0.000	1827.662	-18.290	-0.000	2292.783	6.090	0.000
133.	3357.238	2.030	0.000	1817.452	-17.290	-0.000	2296.894	5.630	-0.000
134.	3359.235	1.870	0.000	1807.930	-16.200	-0.000	2300.681	5.160	-0.000
135.	3361.073	1.710	0.000	1799.132	-15.020	-0.000	2304.140	4.660	0.000
136.	3362.745	1.550	0.000	1791.093	-13.750	-0.000	2307.278	4.210	-0.000
137.	3364.247	1.380	0.000	1783.842	-12.400	-0.000	2310.067	3.730	0.000
138.	3365.574	1.210	0.000	1777.408	-10.960	-0.000	2312.524	3.250	-0.000
139.	3366.724	1.038	0.000	1771.815	-9.480	0.000	2314.655	2.770	-0.000
140.	3367.694	.860	-0.000	1767.065	-7.920	-0.000	2316.482	2.250	-0.000
141.	3368.481	.680	0.000	1763.234	-6.310	-0.000	2317.630	1.610	-0.000
142.	3369.084	.500	0.000	1760.279	-4.660	-0.000	2318.997	1.330	-0.000
143.	3369.501	.320	0.000	1758.230	-2.970	-0.000	2319.763	.840	0.000
144.	3369.732	.130	0.000	1757.095	-1.260	-0.000	2320.186	.360	0.000
145.	3369.776	-.050	0.000	1756.878	.450	0.000	2320.267	-.130	-0.000
146.	3369.633	-.230	0.000	1757.580	2.170	0.000	2320.086	-.610	0.000
147.	3369.304	-.410	0.000	1759.196	3.870	0.000	2319.481	-1.100	-0.000
148.	3368.789	-.590	0.000	1761.727	5.540	0.000	2318.455	-1.500	0.000
149.	3368.088	-.770	0.000	1765.157	7.170	0.000	2317.168	-2.060	-0.000

BULK

110-PLANE BISMUTH GERMANIUM OXIDE (KRAUT ET AL)									
	LMQVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
150.	3367.205	-0.950	0.000	1769.674	8.750	0.000	2315.541	-2.550	-0.000
151.	3366.139	-1.130	0.000	1774.662	10.260	0.000	2313.574	-3.030	-0.000
152.	3364.895	-1.300	0.000	1780.702	11.740	0.000	2311.271	-3.510	-0.000
153.	3363.475	-1.470	0.000	1787.570	13.120	-0.000	2306.631	-3.960	0.000
154.	3361.083	-1.640	0.000	1795.241	14.430	0.000	2305.659	-4.460	0.000
155.	3360.123	-1.800	0.000	1803.665	15.650	0.000	2302.355	-4.930	0.000
156.	3358.200	-1.960	0.000	1812.469	16.760	0.000	2298.722	-5.400	0.000
157.	3356.121	-2.110	0.000	1822.759	17.830	0.000	2294.764	-5.870	-0.000
158.	3353.891	-2.250	0.000	1833.316	18.760	0.000	2290.483	-6.340	-0.000
159.	3351.521	-2.390	0.000	1844.500	19.630	0.000	2285.683	-6.800	-0.000
160.	3349.018	-2.510	0.000	1856.267	20.350	0.000	2280.968	-7.260	0.000
161.	3346.395	-2.630	0.000	1868.569	21.050	0.000	2275.741	-7.720	0.000
162.	3343.662	-2.730	0.000	1881.359	21.620	0.000	2270.207	-8.170	-0.000
163.	3340.834	-2.820	0.000	1894.585	22.100	0.000	2264.370	-8.610	0.000
164.	3337.926	-2.890	0.000	1908.132	22.480	0.000	2258.235	-9.060	-0.000
165.	3334.957	-2.940	0.000	1922.124	22.760	0.000	2251.806	-9.490	0.000
166.	3331.945	-2.980	0.000	1936.322	22.950	0.000	2245.032	-9.930	0.000
167.	3328.913	-2.990	0.000	1950.724	23.040	0.000	2238.096	-10.350	0.000
168.	3325.884	-2.980	0.000	1965.266	23.040	0.000	2230.823	-10.770	0.000
169.	3322.885	-2.940	0.000	1979.882	22.950	0.000	2223.280	-11.190	0.000
170.	3319.944	-2.870	0.000	1994.584	22.750	0.000	2215.474	-11.600	-0.000
171.	3317.095	-2.760	0.000	2009.059	22.460	0.000	2207.412	-12.000	0.000
172.	3314.369	-2.620	0.000	2023.476	22.080	0.000	2199.100	-12.390	0.000
173.	3311.804	-2.450	0.000	2037.679	21.590	0.000	2190.546	-12.760	0.000
174.	3309.435	-2.230	0.000	2051.592	21.000	0.000	2181.757	-13.160	0.000
175.	3307.316	-1.970	0.000	2065.136	20.300	0.000	2172.742	-13.530	-0.000
176.	3305.476	-1.670	0.000	2078.234	19.500	0.000	2163.519	-13.890	0.000
177.	3303.964	-1.320	0.000	2090.884	18.600	0.000	2154.066	-14.250	0.000
178.	3302.826	-0.930	0.000	2102.767	17.590	0.000	2144.422	-14.590	-0.000
179.	3302.112	-0.490	0.000	2114.045	16.470	0.000	2134.585	-14.920	0.000
180.	3301.863	-0.000	0.000	2124.559	15.250	0.000	2124.567	-15.250	-0.000

BULK

X-PLANE (YZ-PLANE) CADMIUM SULPHIDE									
	LNCVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
0.	4337.906	0.000	0.000	1796.298	0.000	0.000	1838.952	0.000	0.000
1.	4337.811	-1.140	0.000	1796.567	1.580	0.000	1838.929	-0.000	-0.000
2.	4337.526	-2.290	0.000	1797.372	1.960	0.000	1838.862	-1.160	-0.000
3.	4337.052	-4.300	0.000	1798.712	2.930	0.000	1838.751	-2.400	-0.000
4.	4336.390	-5.780	0.000	1800.584	3.890	0.000	1838.595	-3.200	-0.000
5.	4335.539	-7.100	0.000	1802.967	4.840	0.000	1838.394	-4.000	-0.000
6.	4334.583	-8.600	0.000	1805.914	5.780	0.000	1838.150	-4.800	-0.000
7.	4333.282	-9.990	0.000	1809.361	6.690	0.000	1837.862	-5.500	-0.000
8.	4331.878	-1.130	0.000	1813.320	7.560	0.000	1837.531	-6.300	-0.000
9.	4330.293	-1.270	0.000	1817.785	8.450	0.000	1837.156	-7.100	-0.000
10.	4328.532	-1.400	0.000	1822.745	9.290	0.000	1836.739	-7.800	-0.000
11.	4326.597	-1.530	0.000	1828.190	10.100	0.000	1836.280	-8.600	-0.000
12.	4324.453	-1.660	0.000	1834.106	10.870	0.000	1835.779	-9.300	-0.000
13.	4322.223	-1.760	0.000	1840.484	11.610	-0.000	1835.237	-1.010	0.000
14.	4319.794	-1.900	0.000	1847.304	12.310	-0.000	1834.655	-1.080	0.000
15.	4317.212	-2.020	0.000	1854.550	12.970	-0.000	1834.033	-1.150	0.000
16.	4314.484	-2.130	0.000	1862.202	13.560	-0.000	1833.372	-1.220	0.000
17.	4311.617	-2.230	0.000	1870.240	14.140	-0.000	1832.672	-1.290	0.000
18.	4308.621	-2.330	0.000	1878.639	14.650	-0.000	1831.936	-1.350	0.000
19.	4305.586	-2.420	0.000	1887.375	15.110	-0.000	1831.162	-1.420	0.000
20.	4302.282	-2.500	0.000	1896.419	15.520	-0.000	1830.353	-1.480	0.000
21.	4298.963	-2.570	0.000	1905.741	15.860	-0.000	1829.509	-1.540	0.000
22.	4295.560	-2.630	0.000	1915.316	16.150	-0.000	1828.632	-1.600	0.000
23.	4292.069	-2.670	0.000	1925.092	16.380	-0.000	1827.722	-1.660	0.000
24.	4288.566	-2.710	0.000	1935.049	16.540	-0.000	1826.780	-1.720	0.000
25.	4285.007	-2.730	0.000	1945.143	16.640	-0.000	1825.807	-1.770	0.000
26.	4281.431	-2.740	0.000	1955.373	16.790	-0.000	1824.805	-1.830	0.000
27.	4277.857	-2.730	0.000	1965.777	16.840	-0.000	1823.775	-1.880	0.000
28.	4274.306	-2.710	0.000	1975.830	16.940	-0.000	1822.717	-1.930	0.000
29.	4270.801	-2.670	0.000	1986.045	16.970	-0.000	1821.634	-1.970	0.000
30.	4267.364	-2.610	0.000	1996.176	16.120	-0.000	1820.526	-2.020	0.000
31.	4264.019	-2.530	0.000	2006.173	15.810	-0.000	1819.395	-2.060	0.000
32.	4260.791	-2.430	0.000	2015.985	15.420	-0.000	1818.242	-2.100	0.000
33.	4257.766	-2.320	0.000	2025.561	14.950	-0.000	1817.069	-2.140	0.000
34.	4254.791	-2.180	0.000	2034.850	14.410	-0.000	1815.876	-2.170	0.000
35.	4252.071	-2.020	0.000	2043.801	13.800	-0.000	1814.666	-2.200	0.000
36.	4249.575	-1.840	0.000	2052.360	13.120	-0.000	1813.439	-2.230	0.000
37.	4247.327	-1.630	0.000	2060.477	12.360	-0.000	1812.197	-2.260	0.000
38.	4245.357	-1.410	0.000	2068.102	11.530	-0.000	1810.942	-2.290	0.000
39.	4243.688	-1.170	0.000	2075.284	10.630	-0.000	1809.676	-2.310	0.000
40.	4242.346	-930	0.000	2081.877	9.660	-0.000	1808.399	-2.330	0.000
41.	4241.356	-630	0.000	2087.534	8.620	-0.000	1807.113	-2.340	0.000
42.	4240.738	-330	0.000	2092.714	7.530	-0.000	1805.820	-2.360	0.000
43.	4240.515	-020	0.000	2097.176	6.360	-0.000	1804.521	-2.370	0.000
44.	4240.703	310	-0.000	2100.683	5.170	-0.000	1803.218	-2.370	0.000
45.	4241.318	650	-0.000	2103.804	3.920	-0.000	1801.912	-2.380	0.000
46.	4242.375	930	-0.000	2105.909	2.630	-0.000	1800.606	-2.380	0.000
47.	4243.882	1.340	-0.000	2107.174	1.310	-0.000	1799.300	-2.380	0.000
48.	4245.847	1.700	-0.000	2107.580	-0.040	-0.000	1797.997	-2.380	0.000
49.	4248.272	2.050	-0.000	2107.114	-1.410	0.000	1796.697	-2.370	0.000

BULK

X-PLANE (YZ-PLANE) CADMIUM SULPHIDE

	LNGLVL	LPHI12	LPHI13	FSRWEL	FSPHI12	FSPHI13	SSRWEL	SSPHI12	SSPHI13
50.	4251.159	2.440	-0.000	2105.767	-2.790	0.000	1795.403	-2.360	0.000
51.	4254.503	2.750	-0.000	2103.536	-4.160	0.000	1794.115	-2.350	0.000
52.	4258.297	3.090	-0.000	2100.422	-5.530	0.000	1792.837	-2.330	0.000
53.	4262.530	3.420	-0.000	2096.435	-6.890	0.000	1791.568	-2.310	0.000
54.	4267.189	3.740	-0.000	2091.507	-8.220	0.000	1790.312	-2.290	0.000
55.	4272.255	4.040	-0.000	2085.899	-9.510	0.000	1789.068	-2.270	0.000
56.	4277.707	4.320	-0.000	2079.395	-10.770	0.000	1787.840	-2.240	0.000
57.	4283.522	4.580	-0.000	2072.104	-11.960	0.000	1786.627	-2.210	0.000
58.	4289.672	4.820	-0.000	2064.862	-13.130	0.000	1785.433	-2.180	0.000
59.	4296.130	5.030	-0.000	2055.310	-14.230	0.000	1784.256	-2.140	0.000
60.	4302.864	5.220	-0.000	2045.890	-15.250	0.000	1783.104	-2.100	0.000
61.	4309.841	5.380	-0.000	2035.852	-16.210	0.000	1781.972	-2.060	0.000
62.	4317.026	5.520	-0.000	2025.249	-17.090	0.000	1780.864	-2.020	0.000
63.	4324.384	5.620	-0.000	2014.136	-17.890	0.000	1779.782	-1.970	0.000
64.	4331.877	5.700	-0.000	2002.573	-18.610	0.000	1778.725	-1.920	0.000
65.	4339.469	5.750	-0.000	1990.622	-19.240	0.000	1777.697	-1.870	0.000
66.	4347.122	5.770	-0.000	1978.346	-19.770	0.000	1776.697	-1.820	0.000
67.	4354.798	5.770	-0.000	1965.819	-20.220	0.000	1775.728	-1.760	0.000
68.	4362.460	5.730	-0.000	1953.104	-20.560	0.000	1774.791	-1.700	0.000
69.	4370.070	5.670	-0.000	1940.272	-20.800	0.000	1773.886	-1.640	0.000
70.	4377.593	5.560	-0.000	1927.395	-20.940	0.000	1773.015	-1.580	0.000
71.	4384.993	5.470	-0.000	1914.546	-20.960	0.000	1772.180	-1.510	0.000
72.	4392.234	5.330	-0.000	1901.796	-20.900	0.000	1771.380	-1.450	0.000
73.	4399.284	5.170	-0.000	1889.223	-20.710	0.000	1770.616	-1.380	0.000
74.	4406.111	4.980	-0.000	1876.895	-20.400	0.000	1769.894	-1.310	0.000
75.	4412.884	4.760	-0.000	1864.803	-19.970	0.000	1769.209	-1.230	0.000
76.	4418.973	4.550	-0.000	1853.259	-19.430	0.000	1768.564	-1.160	0.000
77.	4424.952	4.310	-0.000	1842.092	-18.750	0.000	1767.960	-1.080	0.000
78.	4430.593	4.040	-0.000	1831.446	-17.960	0.000	1767.397	-1.010	0.000
79.	4435.874	3.760	-0.000	1821.392	-17.040	0.000	1766.877	-0.930	0.000
80.	4440.722	3.470	-0.000	1811.985	-15.990	0.000	1766.399	-0.850	0.000
81.	4445.265	3.160	-0.000	1803.284	-14.820	0.000	1765.965	-0.770	0.000
82.	4449.336	2.840	-0.000	1795.344	-13.530	0.000	1765.576	-0.680	0.000
83.	4452.968	2.510	-0.000	1788.215	-12.130	0.000	1765.231	-0.590	0.000
84.	4456.146	2.170	-0.000	1781.941	-10.620	0.000	1764.931	-0.520	0.000
85.	4458.857	1.820	-0.000	1776.562	-9.010	0.000	1764.676	-0.430	0.000
86.	4461.089	1.460	-0.000	1772.113	-7.320	0.000	1764.468	-0.350	0.000
87.	4462.835	1.100	-0.000	1768.623	-5.560	0.000	1764.305	-0.260	0.000
88.	4464.087	.740	-0.000	1766.113	-3.740	0.000	1764.189	-0.170	0.000
89.	4464.840	.370	-0.000	1764.601	-1.880	0.000	1764.119	-0.090	0.000
90.	4465.092	-0.000	-0.000	1764.096	0.000	0.000	1764.096	0.000	0.000
91.	4464.840	-.370	-0.000	1764.601	1.880	0.000	1764.119	0.090	0.000
92.	4464.087	-.740	-0.000	1766.113	3.740	0.000	1764.189	0.170	0.000
93.	4462.835	-1.100	-0.000	1768.623	5.560	0.000	1764.305	0.260	0.000
94.	4461.089	-1.460	-0.000	1772.113	7.320	0.000	1764.468	0.350	0.000
95.	4458.857	-1.820	-0.000	1776.562	9.010	0.000	1764.676	0.430	0.000
96.	4456.146	-2.170	-0.000	1781.941	10.620	0.000	1764.931	0.520	0.000
97.	4452.968	-2.510	-0.000	1788.215	12.130	0.000	1765.231	0.590	0.000
98.	4449.336	-2.840	-0.000	1795.344	13.530	0.000	1765.576	0.680	0.000
99.	4445.265	-3.160	-0.000	1803.284	14.820	0.000	1765.965	0.770	0.000

BULK

X-PLANE (YZ-PLANE) CADMIUM SULPHIDE

	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
100.	4440.772	-3.470	-0.000	1811.985	15.950	0.000	1766.399	.659	0.000
101.	4435.874	-3.760	-0.000	1821.392	17.040	0.000	1766.877	.530	0.000
102.	4430.593	-4.040	-0.000	1831.446	17.960	0.000	1767.397	1.010	0.000
103.	4424.952	-4.310	-0.000	1842.092	18.750	0.000	1767.960	1.000	0.000
104.	4418.973	-4.550	-0.000	1853.259	19.430	0.000	1768.564	1.160	0.000
105.	4412.604	-4.760	-0.000	1864.863	19.970	0.000	1769.209	1.230	0.000
106.	4406.111	-4.980	-0.000	1876.895	20.400	0.000	1769.894	1.310	0.000
107.	4399.284	-5.170	-0.000	1889.223	20.710	0.000	1770.618	1.360	0.000
108.	4392.234	-5.330	-0.000	1901.796	20.900	0.000	1771.360	1.450	0.000
109.	4384.993	-5.470	-0.000	1914.546	20.960	0.000	1772.180	1.510	0.000
110.	4377.593	-5.580	-0.000	1927.395	20.960	0.000	1773.015	1.500	0.000
111.	4370.070	-5.670	-0.000	1940.272	20.860	0.000	1773.866	1.640	0.000
112.	4362.460	-5.730	-0.000	1953.104	20.560	0.000	1774.791	1.700	0.000
113.	4354.796	-5.770	-0.000	1965.815	20.220	0.000	1775.728	1.760	0.000
114.	4347.122	-5.770	-0.000	1978.366	19.770	0.000	1776.697	1.820	0.000
115.	4339.469	-5.750	-0.000	1990.622	19.240	0.000	1777.697	1.870	0.000
116.	4331.827	-5.700	-0.000	2002.573	18.610	0.000	1778.725	1.920	0.000
117.	4324.384	-5.620	-0.000	2014.136	17.890	0.000	1779.782	1.970	0.000
118.	4317.026	-5.520	-0.000	2025.249	17.090	0.000	1780.864	2.020	0.000
119.	4309.841	-5.380	-0.000	2035.852	16.210	0.000	1781.972	2.060	0.000
120.	4302.864	-5.220	-0.000	2045.890	15.250	0.000	1783.104	2.100	0.000
121.	4296.130	-5.030	-0.000	2055.310	14.230	0.000	1784.258	2.140	0.000
122.	4289.622	-4.820	-0.000	2064.062	13.130	0.000	1785.433	2.180	0.000
123.	4283.322	-4.580	-0.000	2072.104	11.960	0.000	1786.627	2.210	0.000
124.	4277.207	-4.320	-0.000	2079.395	10.770	0.000	1787.840	2.240	0.000
125.	4271.255	-4.040	-0.000	2085.899	9.510	0.000	1789.068	2.270	0.000
126.	4265.469	-3.740	-0.000	2091.587	8.220	0.000	1790.312	2.290	0.000
127.	4260.830	-3.420	-0.000	2096.435	6.890	0.000	1791.566	2.310	0.000
128.	4256.297	-3.090	-0.000	2100.422	5.530	0.000	1792.837	2.330	0.000
129.	4251.983	-2.750	-0.000	2103.536	4.160	0.000	1794.115	2.350	0.000
130.	4247.859	-2.400	-0.000	2105.767	2.790	0.000	1795.403	2.360	0.000
131.	4243.872	-2.050	-0.000	2107.114	1.410	0.000	1796.697	2.370	0.000
132.	4240.082	-1.700	-0.000	2107.580	.040	0.000	1797.997	2.380	0.000
133.	4236.535	-1.340	-0.000	2107.174	-1.310	0.000	1799.300	2.380	0.000
134.	4233.175	-990	-0.000	2105.909	-2.630	0.000	1800.606	2.380	0.000
135.	4229.938	-650	-0.000	2103.804	-3.920	0.000	1801.912	2.380	0.000
136.	4226.793	-310	-0.000	2100.863	-5.170	0.000	1803.218	2.370	0.000
137.	4223.718	.020	0.000	2097.176	-6.380	0.000	1804.521	2.370	0.000
138.	4220.738	.330	0.000	2092.714	-7.530	0.000	1805.820	2.360	0.000
139.	4217.866	.630	0.000	2087.534	-8.620	0.000	1807.113	2.340	0.000
140.	4215.091	.910	0.000	2081.677	-9.660	0.000	1808.399	2.330	0.000
141.	4212.408	1.170	0.000	2075.184	-10.630	0.000	1809.676	2.310	0.000
142.	4209.817	1.410	0.000	2068.102	-11.530	0.000	1810.942	2.280	0.000
143.	4207.327	1.630	0.000	2060.477	-12.360	0.000	1812.197	2.260	0.000
144.	4204.935	1.840	0.000	2052.360	-13.120	0.000	1813.439	2.230	0.000
145.	4202.641	2.020	0.000	2043.881	-13.800	0.000	1814.666	2.200	0.000
146.	4200.435	2.180	0.000	2034.850	-14.410	0.000	1815.876	2.170	0.000
147.	4198.306	2.320	0.000	2025.561	-14.950	0.000	1817.069	2.140	0.000
148.	4196.231	2.430	0.000	2015.985	-15.420	0.000	1818.242	2.100	0.000
149.	4194.209	2.530	0.000	2006.173	-15.810	0.000	1819.395	2.060	0.000

BULK

X-PLANE (YZ-PLANE) CADMIUM SULPHIDE

	LNGL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
150.	4267.364	2.610	0.000	1996.176	-16.120	-0.000	1020.526	2.020	0.000
151.	4270.801	2.670	0.000	1986.045	-16.370	-0.000	1021.634	1.970	0.000
152.	4274.306	2.710	0.000	1975.830	-16.540	-0.000	1022.717	1.930	0.000
153.	4277.857	2.730	0.000	1965.577	-16.640	-0.000	1023.775	1.890	0.000
154.	4281.431	2.740	0.000	1955.333	-16.790	-0.000	1024.805	1.830	0.000
155.	4285.007	2.730	0.000	1945.143	-16.840	-0.000	1025.807	1.770	0.000
156.	4288.566	2.710	0.000	1935.849	-16.940	-0.000	1026.780	1.720	0.000
157.	4292.069	2.670	0.000	1925.592	-16.980	-0.000	1027.722	1.660	0.000
158.	4295.560	2.630	0.000	1915.310	-16.150	-0.000	1028.632	1.600	0.000
159.	4298.963	2.570	0.000	1905.741	-15.660	-0.000	1029.509	1.540	0.000
160.	4302.282	2.500	0.000	1896.419	-15.520	-0.000	1030.353	1.480	0.000
161.	4305.506	2.420	0.000	1887.375	-15.110	-0.000	1031.162	1.420	0.000
162.	4308.621	2.330	0.000	1878.539	-14.650	-0.000	1031.936	1.350	0.000
163.	4311.617	2.230	0.000	1870.240	-14.140	-0.000	1032.672	1.290	0.000
164.	4314.484	2.130	0.000	1862.202	-13.580	-0.000	1033.372	1.220	0.000
165.	4317.212	2.020	0.000	1854.550	-12.970	-0.000	1034.033	1.150	0.000
166.	4319.794	1.900	0.000	1847.304	-12.310	-0.000	1034.655	1.060	0.000
167.	4322.223	1.760	0.000	1840.484	-11.510	-0.000	1035.237	1.010	0.000
168.	4324.493	1.600	0.000	1834.106	-10.870	0.000	1035.779	.930	-0.000
169.	4326.597	1.530	0.000	1828.190	-10.160	0.000	1036.280	.660	-0.000
170.	4328.532	1.400	0.000	1822.745	-9.290	0.000	1036.739	.700	-0.000
171.	4330.293	1.270	0.000	1817.785	-8.450	0.000	1037.156	.710	-0.000
172.	4331.876	1.130	0.000	1813.320	-7.560	0.000	1037.531	.630	-0.000
173.	4333.282	.990	0.000	1809.361	-6.690	0.000	1037.862	.550	-0.000
174.	4334.503	.860	0.000	1805.914	-5.780	0.000	1038.150	.480	-0.000
175.	4335.539	.710	0.000	1802.987	-4.840	0.000	1038.394	.400	-0.000
176.	4336.390	.570	0.000	1800.584	-3.890	0.000	1038.595	.320	-0.000
177.	4337.052	.430	0.000	1798.712	-2.930	0.000	1038.751	.240	-0.000
178.	4337.526	.290	0.000	1797.372	-1.960	0.000	1038.862	.160	-0.000
179.	4337.811	.140	0.000	1796.567	-.980	0.000	1038.929	.800	-0.000
180.	4337.906	-0.000	-0.000	1796.298	-0.000	0.000	1039.952	0.000	0.000

Z-PLANE (XY-PLANE) DIAMOND

	LPMI12	LPMI13	FSRVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13
0.	0.000	0.000	12604.381	0.000	0.000	12604.381	0.000	0.000
1.	0.450	0.000	12602.750	-0.640	0.000	12604.381	-0.000	0.000
2.	0.890	0.000	12797.872	-1.660	0.000	12604.381	0.000	0.000
3.	1.320	0.000	12789.782	-2.480	0.000	12604.381	0.000	0.000
4.	1.750	0.000	12778.542	-3.280	0.000	12604.381	0.000	0.000
5.	2.150	0.000	12766.236	-4.060	0.000	12604.381	0.000	0.000
6.	2.540	0.000	12746.968	-4.810	0.000	12604.381	0.000	0.000
7.	2.910	0.000	12726.863	-5.520	0.000	12604.381	0.000	0.000
8.	3.250	0.000	12708.064	-6.200	0.000	12604.381	0.000	0.000
9.	3.560	0.000	12678.726	-6.840	0.000	12604.381	0.000	0.000
10.	3.850	0.000	12651.026	-7.440	0.000	12604.381	0.000	0.000
11.	4.110	0.000	12621.142	-7.990	0.000	12604.381	0.000	0.000
12.	4.340	0.000	12589.265	-8.490	0.000	12604.381	0.000	0.000
13.	4.540	0.000	12555.544	-8.950	0.000	12604.381	0.000	0.000
14.	4.710	0.000	12520.333	-9.350	0.000	12604.381	0.000	0.000
15.	4.840	0.000	12483.687	-9.710	0.000	12604.381	0.000	0.000
16.	4.950	0.000	12445.865	-10.010	0.000	12604.381	0.000	0.000
17.	5.030	0.000	12407.076	-10.260	0.000	12604.381	0.000	0.000
18.	5.090	0.000	12367.526	-10.460	0.000	12604.381	0.000	0.000
19.	5.110	0.000	12327.421	-10.610	0.000	12604.381	0.000	0.000
20.	5.110	0.000	12286.964	-10.710	0.000	12604.381	0.000	0.000
21.	5.080	0.000	12246.353	-10.760	0.000	12604.381	0.000	0.000
22.	5.040	0.000	12205.764	-10.760	0.000	12604.381	0.000	0.000
23.	4.960	0.000	12165.445	-10.710	0.000	12604.381	0.000	0.000
24.	4.870	0.000	12125.522	-10.610	0.000	12604.381	0.000	0.000
25.	4.760	0.000	12086.192	-10.470	0.000	12604.381	0.000	0.000
26.	4.630	0.000	12047.627	-10.260	0.000	12604.381	0.000	0.000
27.	4.480	0.000	12009.995	-10.040	0.000	12604.381	0.000	0.000
28.	4.310	0.000	11973.452	-9.760	0.000	12604.381	0.000	0.000
29.	4.130	0.000	11938.152	-9.440	0.000	12604.381	0.000	0.000
30.	3.940	0.000	11904.240	-9.070	0.000	12604.381	0.000	0.000
31.	3.730	0.000	11871.851	-8.670	0.000	12604.381	0.000	0.000
32.	3.510	0.000	11841.117	-8.220	0.000	12604.381	0.000	0.000
33.	3.280	0.000	11812.156	-7.740	0.000	12604.381	0.000	0.000
34.	3.040	0.000	11785.088	-7.230	0.000	12604.381	0.000	0.000
35.	2.790	0.000	11760.012	-6.680	0.000	12604.381	0.000	0.000
36.	2.540	0.000	11737.027	-6.100	0.000	12604.381	0.000	0.000
37.	2.270	0.000	11716.222	-5.500	0.000	12604.381	0.000	0.000
38.	2.000	0.000	11697.675	-4.870	0.000	12604.381	0.000	0.000
39.	1.730	0.000	11681.458	-4.220	0.000	12604.381	0.000	0.000
40.	1.450	0.000	11667.631	-3.540	0.000	12604.381	0.000	0.000
41.	1.160	0.000	11656.246	-2.860	0.000	12604.381	0.000	0.000
42.	0.870	0.000	11647.347	-2.150	0.000	12604.381	0.000	0.000
43.	0.580	0.000	11640.966	-1.440	0.000	12604.381	0.000	0.000
44.	0.290	0.000	11637.126	-0.720	0.000	12604.381	0.000	0.000
45.	0.000	0.000	11635.847	0.000	0.000	12604.381	0.000	0.000
46.	-0.250	0.000	11637.126	1.440	0.000	12604.381	0.000	0.000
47.	-0.580	0.000	11640.966	2.150	0.000	12604.381	0.000	0.000
48.	-0.870	0.000	11647.347	2.860	0.000	12604.381	0.000	0.000
49.	-1.160	0.000	11656.246	2.860	0.000	12604.381	0.000	0.000

Z-PLANE (XY-PLANE) DIAMOND

	LNGVEL	LPMI12	LPMI13	FSRVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13
50.	18281.047	-1.450	0.000	11667.631	3.540	0.000	12604.381	-0.000	0.000
51.	18272.215	-1.730	0.000	11681.458	4.220	0.000	12604.381	-0.600	0.000
52.	18261.837	-2.000	0.000	11697.675	4.870	0.000	12604.381	0.000	0.000
53.	18249.943	-2.270	0.000	11716.222	5.500	0.000	12604.381	0.000	0.000
54.	18236.570	-2.540	0.000	11737.027	6.100	0.000	12604.381	0.000	0.000
55.	18221.757	-2.790	0.000	11760.012	6.680	0.000	12604.381	-0.000	0.000
56.	18205.549	-3.040	0.000	11785.088	7.230	0.000	12604.381	0.000	0.000
57.	18187.997	-3.280	0.000	11812.158	7.740	0.000	12604.381	0.000	0.000
58.	18169.157	-3.510	0.000	11841.117	8.220	0.000	12604.381	-0.000	0.000
59.	18149.089	-3.730	0.000	11871.851	8.670	0.000	12604.381	0.000	0.000
60.	18127.862	-3.940	0.000	11904.240	9.070	0.000	12604.381	0.000	0.000
61.	18105.547	-4.130	0.000	11938.152	9.440	0.000	12604.381	0.000	0.000
62.	18082.222	-4.310	0.000	11973.452	9.760	0.000	12604.381	0.000	0.000
63.	18057.971	-4.480	0.000	12009.955	10.040	0.000	12604.381	0.000	0.000
64.	18032.886	-4.630	0.000	12047.955	10.280	0.000	12604.381	-0.000	0.000
65.	18007.062	-4.760	0.000	12086.192	10.470	0.000	12604.381	0.000	0.000
66.	17980.601	-4.870	0.000	12125.522	10.610	0.000	12604.381	0.000	0.000
67.	17953.614	-4.960	0.000	12165.445	10.710	0.000	12604.381	0.000	0.000
68.	17926.214	-5.040	0.000	12205.784	10.760	0.000	12604.381	0.000	0.000
69.	17898.523	-5.080	0.000	12246.353	10.760	0.000	12604.381	-0.000	0.000
70.	17870.669	-5.110	0.000	12286.984	10.710	0.000	12604.381	0.000	0.000
71.	17842.785	-5.110	0.000	12327.421	10.610	0.000	12604.381	0.000	0.000
72.	17815.011	-5.090	0.000	12367.526	10.460	0.000	12604.381	0.000	0.000
73.	17787.489	-5.030	0.000	12407.076	10.260	0.000	12604.381	0.000	0.000
74.	17760.370	-4.950	0.000	12445.855	10.010	0.000	12604.381	0.000	0.000
75.	17733.805	-4.840	0.000	12483.657	9.710	0.000	12604.381	-0.000	0.000
76.	17707.952	-4.710	0.000	12520.333	9.350	0.000	12604.381	0.000	0.000
77.	17682.966	-4.540	0.000	12555.594	8.950	0.000	12604.381	0.000	0.000
78.	17659.012	-4.340	0.000	12589.265	8.490	0.000	12604.381	0.000	0.000
79.	17636.243	-4.110	0.000	12621.182	7.990	0.000	12604.381	0.000	0.000
80.	17614.818	-3.850	0.000	12651.026	7.440	0.000	12604.381	0.000	0.000
81.	17594.890	-3.560	0.000	12678.726	6.840	0.000	12604.381	-0.000	0.000
82.	17576.606	-3.250	0.000	12704.084	6.200	0.000	12604.381	0.000	0.000
83.	17560.104	-2.910	0.000	12726.863	5.520	0.000	12604.381	0.000	0.000
84.	17545.515	-2.540	0.000	12746.966	4.810	0.000	12604.381	0.000	0.000
85.	17532.957	-2.150	0.000	12764.236	4.060	0.000	12604.381	-0.000	0.000
86.	17522.533	-1.750	0.000	12778.542	3.280	0.000	12604.381	0.000	0.000
87.	17514.330	-1.320	0.000	12789.782	2.480	0.000	12604.381	0.000	0.000
88.	17508.420	-0.890	0.000	12797.872	1.660	0.000	12604.381	-0.000	0.000
89.	17504.853	0.000	0.000	12802.750	0.840	0.000	12604.381	0.000	0.000
90.	17503.661	0.000	0.000	12804.381	-0.000	0.000	12604.381	0.000	0.000
91.	17504.853	0.450	0.000	12802.750	-0.840	0.000	12604.381	0.000	0.000
92.	17508.420	0.890	0.000	12797.872	-1.660	0.000	12604.381	0.000	0.000
93.	17514.330	1.320	0.000	12789.782	-2.480	0.000	12604.381	0.000	0.000
94.	17522.533	1.750	0.000	12778.542	-3.280	0.000	12604.381	0.000	0.000
95.	17532.957	2.150	0.000	12764.236	-4.060	0.000	12604.381	0.000	0.000
96.	17545.515	2.540	0.000	12746.966	-4.810	0.000	12604.381	0.000	0.000
97.	17560.104	2.910	0.000	12726.863	-5.520	0.000	12604.381	0.000	0.000
98.	17576.606	3.250	0.000	12704.084	-6.200	0.000	12604.381	0.000	0.000
99.	17594.890	3.560	0.000	12678.726	-6.840	0.000	12604.381	0.000	0.000

BULK

Z-PLANE (XY-PLANE) DIAMOND									
	LPHI12	LPHI13	FSPH12	FSPH13	SSPH12	SSPH13	BULK	SSPH12	SSPH13
100.	17614.816	0.000	12651.026	-7.460	12804.381	0.000	12804.381	-0.000	0.000
101.	17836.243	4.110	12621.142	-7.990	12804.381	0.000	12804.381	-0.000	0.000
102.	17659.812	0.000	12589.265	-8.490	12804.381	0.000	12804.381	-0.000	0.000
103.	17682.966	4.540	12555.594	-8.950	12804.381	0.000	12804.381	-0.000	0.000
104.	17707.952	4.710	12520.333	-9.350	12804.381	0.000	12804.381	-0.000	0.000
105.	17733.805	4.840	12483.687	-9.710	12804.381	0.000	12804.381	-0.000	0.000
106.	17760.370	4.950	12445.865	-10.010	12804.381	0.000	12804.381	-0.000	0.000
107.	17787.489	5.030	12407.076	-10.266	12804.381	0.000	12804.381	-0.000	0.000
108.	17815.011	5.090	12367.526	-10.466	12804.381	0.000	12804.381	-0.000	0.000
109.	17842.785	5.110	12327.421	-10.610	12804.381	0.000	12804.381	-0.000	0.000
110.	17870.669	5.110	12286.964	-10.710	12804.381	0.000	12804.381	-0.000	0.000
111.	17898.523	5.080	12246.353	-10.760	12804.381	0.000	12804.381	-0.000	0.000
112.	17926.214	5.040	12205.704	-10.760	12804.381	0.000	12804.381	-0.000	0.000
113.	17953.614	4.960	12165.445	-10.710	12804.381	0.000	12804.381	-0.000	0.000
114.	17980.601	4.870	12125.522	-10.610	12804.381	0.000	12804.381	-0.000	0.000
115.	18007.062	4.760	12086.192	-10.470	12804.381	0.000	12804.381	-0.000	0.000
116.	18032.886	4.630	12047.627	-10.266	12804.381	0.000	12804.381	-0.000	0.000
117.	18057.971	4.480	12009.995	-10.046	12804.381	0.000	12804.381	-0.000	0.000
118.	18082.222	4.310	11973.452	-9.760	12804.381	0.000	12804.381	-0.000	0.000
119.	18105.547	4.130	11938.152	-9.440	12804.381	0.000	12804.381	-0.000	0.000
120.	18127.862	3.940	11904.240	-9.070	12804.381	0.000	12804.381	-0.000	0.000
121.	18149.089	3.730	11871.851	-8.670	12804.381	0.000	12804.381	-0.000	0.000
122.	18169.157	3.510	11841.117	-8.220	12804.381	0.000	12804.381	-0.000	0.000
123.	18187.997	3.280	11812.158	-7.740	12804.381	0.000	12804.381	-0.000	0.000
124.	18205.545	3.040	11785.086	-7.230	12804.381	0.000	12804.381	-0.000	0.000
125.	18221.757	2.790	11760.012	-6.660	12804.381	0.000	12804.381	-0.000	0.000
126.	18236.570	2.548	11737.827	-6.100	12804.381	0.000	12804.381	-0.000	0.000
127.	18249.943	2.278	11716.222	-5.500	12804.381	0.000	12804.381	-0.000	0.000
128.	18261.837	2.000	11697.675	-4.870	12804.381	0.000	12804.381	-0.000	0.000
129.	18272.215	1.730	11681.456	-4.220	12804.381	0.000	12804.381	-0.000	0.000
130.	18281.047	1.450	11667.631	-3.540	12804.381	0.000	12804.381	-0.000	0.000
131.	18288.309	1.160	11656.246	-2.860	12804.381	0.000	12804.381	-0.000	0.000
132.	18293.976	-0.70	11647.347	-2.150	12804.381	0.000	12804.381	-0.000	0.000
133.	18298.038	-560	11640.966	-1.440	12804.381	0.000	12804.381	-0.000	0.000
134.	18300.479	-290	11637.126	-0.720	12804.381	0.000	12804.381	-0.000	0.000
135.	18301.294	-0.000	11635.847	0.000	12804.381	0.000	12804.381	-0.000	0.000
136.	18300.479	-2.290	11637.128	0.720	12804.381	0.000	12804.381	-0.000	0.000
137.	18298.036	-560	11640.966	1.440	12804.381	0.000	12804.381	-0.000	0.000
138.	18293.976	-0.70	11647.347	2.150	12804.381	0.000	12804.381	-0.000	0.000
139.	18288.309	-1.160	11656.246	2.860	12804.381	0.000	12804.381	-0.000	0.000
140.	18281.047	-1.450	11667.631	3.540	12804.381	0.000	12804.381	-0.000	0.000
141.	18272.215	-1.730	11681.456	4.220	12804.381	0.000	12804.381	-0.000	0.000
142.	18261.837	-2.000	11697.675	4.870	12804.381	0.000	12804.381	-0.000	0.000
143.	18249.943	-2.270	11716.222	5.500	12804.381	0.000	12804.381	-0.000	0.000
144.	18236.570	-2.540	11737.827	6.100	12804.381	0.000	12804.381	-0.000	0.000
145.	18221.757	-2.790	11760.012	6.660	12804.381	0.000	12804.381	-0.000	0.000
146.	18205.549	-3.040	11785.086	7.230	12804.381	0.000	12804.381	-0.000	0.000
147.	18187.997	-3.240	11812.158	7.740	12804.381	0.000	12804.381	-0.000	0.000
148.	18169.157	-3.510	11841.117	8.220	12804.381	0.000	12804.381	-0.000	0.000
149.	18149.089	-3.730	11871.851	8.670	12804.381	0.000	12804.381	-0.000	0.000

Z-PLANE (XY-PLANE) DIAMOND										BULK		
	LNGVEL	LPHI12	LPHI13	FSPVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13			
150.	18127.862	-3.940	0.000	11904.240	9.070	0.000	12004.361	0.000	0.000			
151.	18135.547	-4.130	0.000	11938.152	9.440	0.000	12004.361	0.000	0.000			
152.	18082.222	-4.310	0.000	11973.452	9.760	0.000	12004.361	-0.000	0.000			
153.	18097.971	-4.480	0.000	12009.995	10.040	0.000	12004.361	0.000	0.000			
154.	18032.686	-4.630	0.000	12047.627	10.260	0.000	12004.361	0.000	0.000			
155.	18007.062	-4.760	0.000	12086.192	10.470	0.000	12004.361	0.000	0.000			
156.	17980.601	-4.870	0.000	12125.522	10.610	0.000	12004.361	0.000	0.000			
157.	17953.614	-4.960	0.000	12165.445	10.710	0.000	12004.361	0.000	0.000			
158.	17926.214	-5.040	0.000	12205.784	10.760	0.000	12004.361	-0.000	0.000			
159.	17898.523	-5.060	0.000	12246.353	10.760	0.000	12004.361	0.000	0.000			
160.	17870.669	-5.110	0.000	12286.964	10.710	0.000	12004.361	0.000	0.000			
161.	17842.785	-5.110	0.000	12327.421	10.610	0.000	12004.361	0.000	0.000			
162.	17815.011	-5.090	0.000	12367.526	10.460	0.000	12004.361	0.000	0.000			
163.	17787.469	-5.030	0.000	12407.076	10.260	0.000	12004.361	0.000	0.000			
164.	17760.370	-4.950	0.000	12445.865	10.010	0.000	12004.361	0.000	0.000			
165.	17733.805	-4.840	0.000	12483.587	9.710	0.000	12004.361	0.000	0.000			
166.	17707.952	-4.710	0.000	12520.333	9.350	0.000	12004.361	0.000	0.000			
167.	17682.968	-4.540	0.000	12555.594	8.950	0.000	12004.361	0.000	0.000			
168.	17659.012	-4.340	0.000	12589.265	8.490	0.000	12004.361	0.000	0.000			
169.	17636.243	-4.110	0.000	12621.142	7.990	0.000	12004.361	0.000	0.000			
170.	17614.616	-3.850	0.000	12651.026	7.440	0.000	12004.361	-0.000	0.000			
171.	17594.850	-3.560	0.000	12678.726	6.840	0.000	12004.361	-0.000	0.000			
172.	17576.606	-3.250	0.000	12704.064	6.200	0.000	12004.361	-0.000	0.000			
173.	17560.104	-2.910	0.000	12728.863	5.520	0.000	12004.361	-0.000	0.000			
174.	17545.515	-2.540	0.000	12746.968	4.810	0.000	12004.361	-0.000	0.000			
175.	17532.957	-2.150	0.000	12764.236	4.060	0.000	12004.361	-0.000	0.000			
176.	17522.533	-1.750	0.000	12778.542	3.260	0.000	12004.361	-0.000	0.000			
177.	17514.330	-1.320	0.000	12789.782	2.400	0.000	12004.361	-0.000	0.000			
178.	17508.420	-0.850	0.000	12797.872	1.660	0.000	12004.361	-0.000	0.000			
179.	17504.853	-0.450	0.000	12802.750	0.840	0.000	12004.361	0.000	0.000			
180.	17503.661	0.000	0.000	12804.361	-0.000	0.000	12004.361	0.000	0.000			

111-PLANE DIAMOND

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	18301.294	-8.000	0.000	12804.381	-0.000	0.000	11635.847	0.000	0.000
1.	18301.366	.030	.220	12803.664	-.370	-.260	11636.523	.380	-.240
2.	18301.580	.050	.450	12801.516	-.730	-.520	11638.549	.760	-.460
3.	18301.935	.060	.670	12797.946	-1.100	-.760	11641.917	1.140	-.720
4.	18302.426	.100	.890	12792.969	-1.460	-1.030	11646.614	1.510	-.960
5.	18303.047	.120	1.110	12786.607	-1.610	-1.260	11652.622	1.670	-1.130
6.	18303.793	.140	1.320	12778.886	-2.150	-1.530	11659.919	2.230	-1.420
7.	18304.654	.160	1.540	12769.840	-2.490	-1.760	11666.475	2.560	-1.650
8.	18305.620	.160	1.740	12759.510	-2.620	-2.020	11676.255	2.923	-1.810
9.	18306.661	.200	1.940	12747.941	-3.130	-2.250	11688.221	3.240	-2.000
10.	18307.825	.210	2.140	12735.187	-3.430	-2.470	11701.325	3.550	-2.300
11.	18309.039	.220	2.330	12721.306	-3.720	-2.690	11714.515	3.640	-2.500
12.	18310.310	.230	2.510	12706.372	-3.960	-2.910	11726.730	4.110	-2.700
13.	18311.624	.240	2.680	12690.456	-4.230	-3.110	11743.902	4.360	-2.890
14.	18312.965	.240	2.850	12673.643	-4.450	-3.300	11759.554	4.540	-3.070
15.	18314.320	.240	3.010	12656.831	-4.650	-3.490	11776.800	4.790	-3.240
16.	18315.674	.240	3.160	12637.726	-4.820	-3.670	11794.339	4.960	-3.400
17.	18317.011	.240	3.300	12618.850	-4.960	-3.830	11812.460	5.090	-3.550
18.	18318.317	.230	3.430	12599.540	-5.060	-3.950	11831.032	5.190	-3.630
19.	18319.578	.220	3.550	12579.954	-5.120	-4.140	11849.906	5.240	-3.820
20.	18320.780	.210	3.660	12560.276	-5.120	-4.270	11868.906	5.240	-3.940
21.	18321.911	.200	3.770	12540.719	-5.070	-4.400	11887.826	5.160	-4.050
22.	18322.957	.160	3.860	12521.533	-4.940	-4.510	11906.423	5.040	-4.150
23.	18323.909	.160	3.940	12503.014	-4.730	-4.570	11924.406	4.820	-4.250
24.	18324.755	.140	4.010	12485.511	-4.430	-4.710	11941.433	4.500	-4.350
25.	18325.467	.120	4.070	12469.431	-4.000	-4.790	11957.102	4.070	-4.430
26.	18326.097	.100	4.120	12455.237	-3.446	-4.660	11970.953	3.500	-4.430
27.	18326.578	.070	4.164	12443.434	-2.750	-4.910	11982.486	2.750	-4.430
28.	18326.925	.050	4.190	12434.530	-1.930	-4.950	11991.195	1.950	-4.430
29.	18327.135	.030	4.201	12428.974	-1.590	-4.950	11996.633	1.010	-4.470
30.	18327.205	.000	4.210	12427.084	0.000	-4.970	11996.633	0.000	-4.470
31.	18327.135	-.030	4.200	12428.974	.990	-4.970	11996.633	-1.010	-4.470
32.	18326.925	-.050	4.190	12434.530	1.930	-4.950	11991.195	-1.950	-4.430
33.	18326.578	-.070	4.160	12443.434	2.750	-4.910	11982.486	-2.750	-4.430
34.	18326.097	-.100	4.120	12455.237	3.440	-4.860	11970.953	-3.500	-4.430
35.	18325.467	-.120	4.070	12469.431	4.000	-4.790	11957.102	-4.070	-4.350
36.	18324.755	-.140	4.010	12485.511	4.430	-4.710	11941.433	-4.500	-4.250
37.	18323.909	-.160	3.940	12503.014	4.730	-4.620	11924.406	-4.820	-4.250
38.	18322.957	-.160	3.860	12521.533	4.940	-4.510	11906.423	-5.040	-4.150
39.	18321.911	-.200	3.770	12540.719	5.070	-4.400	11887.826	-5.160	-4.050
40.	18320.780	-.210	3.660	12560.276	5.120	-4.270	11868.906	-5.240	-3.940
41.	18319.578	-.220	3.550	12579.954	5.120	-4.140	11849.906	-5.240	-3.820
42.	18318.317	-.230	3.430	12599.540	5.060	-3.950	11831.032	-5.190	-3.630
43.	18317.011	-.240	3.300	12618.850	4.960	-3.830	11812.460	-5.090	-3.550
44.	18315.674	-.240	3.160	12637.726	4.650	-3.670	11794.339	-4.960	-3.400
45.	18314.320	-.240	3.010	12656.831	4.450	-3.490	11776.800	-4.790	-3.240
46.	18312.965	-.240	2.850	12673.643	4.230	-3.300	11759.554	-4.540	-3.070
47.	18311.624	-.240	2.680	12690.456	4.000	-3.110	11743.902	-4.360	-2.890
48.	18310.310	-.230	2.510	12706.372	3.960	-2.910	11726.730	-4.110	-2.700
49.	18309.039	-.220	2.330	12721.306	3.720	-2.690	11714.515	-3.640	-2.500

BULK

111-PLANE DIAMOND

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
50.	10307.025	-210	2.140	12735.187	3.430	-2.470	11701.325	-3.550	-2.530
51.	10306.681	-220	1.940	12747.941	3.130	-2.250	11699.521	-3.240	-2.090
52.	10305.620	-160	1.740	12759.510	2.820	-2.020	11678.255	-2.920	-1.670
53.	10304.653	-150	1.540	12769.840	2.490	-1.780	11668.475	-2.560	-1.620
54.	10303.793	-140	1.320	12778.886	2.150	-1.530	11659.919	-2.230	-1.420
55.	10303.047	-120	1.110	12786.607	1.610	-1.260	11652.622	-1.670	-1.190
56.	10302.426	-100	.890	12792.969	1.460	-1.030	11646.614	-1.510	-1.060
57.	10301.935	-080	.670	12797.946	1.100	-.750	11641.917	-1.140	-.720
58.	10301.580	-050	.450	12801.516	.730	-.520	11636.549	-.760	-.480
59.	10301.366	-030	.220	12803.664	.370	-.260	11636.523	-.260	-.240
60.	10301.294	0.000	0.000	12804.381	-0.000	0.000	11635.447	-0.000	-0.000
61.	10301.366	-030	-.220	12803.664	-.370	.260	11636.523	.360	.240
62.	10301.580	-050	-.450	12801.516	-.730	.520	11636.549	.760	.480
63.	10301.935	-080	-.670	12797.946	-1.100	.780	11641.917	1.140	.720
64.	10302.426	-100	-.890	12792.969	-1.460	1.030	11646.614	1.510	.960
65.	10303.046	-120	-1.110	12786.886	-1.810	1.260	11652.622	1.870	1.130
66.	10303.793	-140	-1.320	12778.886	-2.150	1.530	11659.919	2.230	1.420
67.	10304.654	-160	-1.540	12769.840	-2.490	1.780	11668.474	2.560	1.620
68.	10305.620	-180	-1.740	12759.510	-2.820	2.020	11678.255	2.920	1.870
69.	10306.681	-200	-1.940	12747.941	-3.130	2.250	11699.521	3.240	2.090
70.	10307.825	-210	-2.140	12735.187	-3.430	2.470	11701.325	3.550	2.530
71.	10309.039	-220	-2.330	12721.306	-3.720	2.690	11714.515	3.840	2.800
72.	10310.310	-230	-2.510	12706.372	-4.010	2.910	11726.730	4.110	3.000
73.	10311.624	-240	-2.660	12690.455	-4.230	3.110	11733.502	4.360	3.260
74.	10312.966	-240	-2.850	12673.643	-4.450	3.300	11739.954	4.590	3.670
75.	10314.321	-240	-3.010	12656.031	-4.650	3.490	11746.080	4.790	3.840
76.	10315.674	-240	-3.160	12637.726	-4.820	3.670	11744.339	4.960	3.980
77.	10317.011	-240	-3.300	12616.849	-4.960	3.830	11741.460	5.090	3.500
78.	10318.317	-230	-3.430	12599.540	-5.060	3.990	11731.032	5.190	3.600
79.	10319.576	-220	-3.550	12579.954	-5.120	4.140	11719.906	5.240	3.620
80.	10320.780	-210	-3.660	12560.276	-5.120	4.270	11698.906	5.240	3.940
81.	10321.911	-200	-3.770	12540.719	-5.070	4.400	11687.626	5.160	4.050
82.	10322.956	-160	-3.860	12521.533	-4.940	4.510	11676.423	5.040	4.140
83.	10323.909	-160	-3.940	12503.014	-4.730	4.620	11664.406	4.820	4.220
84.	10324.755	-140	-4.010	12485.511	-4.430	4.710	11651.433	4.500	4.290
85.	10325.487	-120	-4.070	12469.431	-4.000	4.790	11637.102	4.070	4.350
86.	10326.097	-100	-4.120	12455.237	-3.440	4.860	11621.953	3.500	4.400
87.	10326.576	-070	-4.160	12443.434	-2.750	4.910	11605.485	2.790	4.430
88.	10326.925	-050	-4.190	12434.529	-1.930	4.950	11591.195	1.950	4.450
89.	10327.135	0.000	-4.200	12428.974	-.990	4.970	11576.632	1.010	4.470
90.	10327.205	0.000	-4.210	12427.084	0.000	4.960	11564.403	0.000	4.470
91.	10327.135	-030	-4.200	12428.974	.990	4.970	11549.632	-1.010	4.470
92.	10326.925	-050	-4.190	12434.529	1.930	4.950	11531.195	-1.950	4.450
93.	10326.576	-070	-4.160	12443.434	2.750	4.910	11511.485	-2.790	4.430
94.	10326.097	-100	-4.120	12455.237	3.440	4.860	11491.953	-3.500	4.400
95.	10325.487	-120	-4.070	12469.431	4.000	4.790	11471.102	-4.070	4.350
96.	10324.755	-140	-4.010	12485.511	4.430	4.710	11441.433	-4.500	4.290
97.	10323.909	-160	-3.940	12503.014	4.730	4.620	11414.406	-4.820	4.220
98.	10322.956	-180	-3.860	12521.533	4.940	4.510	11396.423	-5.040	4.140
99.	10321.911	-200	-3.770	12540.719	5.070	4.400	11377.626	-5.160	4.050

111-PLANE DIAMOND

	LMVEL	LFMI12	LFMI13	FSRVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13
100.	10320.760	-210	-3.660	12560.276	5.120	4.270	11660.906	-5.240	3.540
101.	10319.578	-220	-3.550	12579.954	5.120	4.140	11649.906	-5.240	3.620
102.	10318.317	-230	-3.430	12599.540	5.060	3.990	11631.032	-5.190	3.690
103.	10317.011	-240	-3.300	12618.849	4.960	3.830	11612.460	-5.090	3.590
104.	10315.674	-240	-3.160	12637.726	4.820	3.670	11794.339	-4.560	3.400
105.	10314.321	-240	-3.010	12656.031	4.650	3.490	11776.800	-4.560	3.240
106.	10312.966	-240	-2.850	12673.643	4.450	3.300	11759.954	-4.590	3.670
107.	10311.624	-240	-2.680	12690.455	4.230	3.110	11743.902	-4.360	2.690
108.	10310.310	-230	-2.510	12706.372	3.960	2.910	11720.730	-4.110	2.780
109.	10309.039	-220	-2.330	12721.306	3.720	2.690	11714.515	-3.840	2.500
110.	10307.825	-210	-2.140	12735.187	3.430	2.470	11701.325	-3.590	2.308
111.	10306.661	-200	-1.940	12747.941	3.130	2.250	11689.221	-3.240	2.090
112.	10305.620	-160	-1.740	12759.510	2.820	2.020	11676.255	-2.520	1.670
113.	10304.654	-160	-1.540	12769.840	2.490	1.760	11660.474	-2.500	1.600
114.	10303.793	-140	-1.320	12778.886	2.150	1.530	11659.919	-2.230	1.420
115.	10303.046	-120	-1.110	12786.506	1.810	1.280	11652.622	-1.870	1.190
116.	10302.426	-100	-0.900	12792.969	1.460	1.030	11646.014	-1.510	0.900
117.	10301.935	-060	-0.670	12797.946	1.100	0.760	11641.917	-1.140	0.720
118.	10301.580	-050	-0.450	12801.516	0.730	0.520	11630.549	-0.760	0.490
119.	10301.366	-030	-0.220	12803.664	0.370	0.260	11630.523	-0.380	0.240
120.	10301.294	-0.000	0.000	12804.381	0.000	0.000	11630.847	0.000	0.000
121.	10301.366	0.030	0.220	12803.664	-0.370	-0.260	11630.523	0.380	-0.240
122.	10301.580	0.050	0.450	12801.516	-0.730	-0.520	11630.549	0.760	-0.490
123.	10301.935	0.060	0.670	12797.946	-1.100	-0.760	11641.917	1.140	-0.720
124.	10302.426	0.100	0.900	12792.969	-1.460	-1.030	11646.014	1.510	-0.900
125.	10303.047	0.120	1.110	12786.507	-1.810	-1.280	11652.622	1.870	-1.190
126.	10303.793	0.140	1.320	12778.886	-2.150	-1.530	11659.919	2.230	-1.420
127.	10304.653	0.160	1.540	12769.840	-2.490	-1.760	11660.475	2.500	-1.600
128.	10305.620	0.180	1.740	12759.510	-2.820	-2.020	11676.255	2.920	-1.670
129.	10306.661	0.200	1.940	12747.941	-3.130	-2.250	11689.221	3.240	-2.070
130.	10307.825	0.210	2.140	12735.187	-3.430	-2.470	11701.325	3.590	-2.300
131.	10309.039	0.220	2.330	12721.306	-3.720	-2.690	11714.515	3.840	-2.500
132.	10310.310	0.230	2.510	12706.372	-3.960	-2.910	11720.730	4.110	-2.780
133.	10311.624	0.240	2.680	12690.455	-4.230	-3.110	11743.902	4.360	-3.020
134.	10312.965	0.240	2.850	12673.643	-4.450	-3.300	11759.954	4.590	-3.240
135.	10314.320	0.240	3.010	12656.031	-4.650	-3.490	11776.800	4.560	-3.400
136.	10315.674	0.240	3.160	12637.726	-4.820	-3.670	11794.339	4.560	-3.590
137.	10317.011	0.240	3.300	12618.849	-4.960	-3.830	11812.460	4.620	-3.690
138.	10318.317	0.230	3.430	12599.540	-5.060	-4.000	11831.032	4.670	-3.820
139.	10319.578	0.210	3.550	12579.954	-5.120	-4.140	11849.906	4.750	-3.940
140.	10320.760	0.200	3.660	12560.277	-5.120	-4.270	11860.906	4.860	-4.060
141.	10321.911	0.160	3.770	12540.719	-5.070	-4.400	11867.826	4.940	-4.180
142.	10322.957	0.160	3.860	12521.533	-4.940	-4.510	11900.423	5.040	-4.220
143.	10323.909	0.160	3.940	12503.014	-4.730	-4.620	11924.406	5.040	-4.220
144.	10324.755	0.120	4.010	12485.511	-4.430	-4.710	11941.433	4.500	-4.220
145.	10325.467	0.100	4.070	12469.431	-4.000	-4.750	11957.102	3.500	-4.300
146.	10326.087	0.070	4.120	12455.237	-3.440	-4.860	11970.953	2.790	-4.400
147.	10326.576	0.050	4.160	12443.434	-2.750	-4.910	11982.486	2.790	-4.400
148.	10326.925	0.030	4.190	12434.530	-1.930	-4.950	11991.195	1.550	-4.400
149.	10327.135	0.030	4.200	12428.974	-0.990	-4.970	11996.633	1.010	-4.400

BULK

111-PLANE DIAGONO									
	LNGVEL	LPRI12	LPRI13	FSRVEL	FSPRI12	FSPRI13	SSRVEL	SSPRI12	SSPRI13
150.	18327.205	0.000	4.210	12427.064	-0.000	-4.970	11998.443	-0.000	-4.470
151.	18327.135	-0.030	4.200	12428.974	.590	-4.970	11996.633	-1.010	-4.470
152.	18326.925	-0.050	4.190	12434.530	1.930	-4.950	11991.195	-1.950	-4.450
153.	18326.576	-0.070	4.160	12443.434	2.750	-4.910	11982.486	-2.790	-4.430
154.	18326.097	-0.100	4.120	12455.237	3.440	-4.860	11970.953	-3.500	-4.400
155.	18325.487	-0.120	4.070	12469.431	4.000	-4.790	11957.182	-4.070	-4.350
156.	18324.755	-0.140	4.010	12485.511	4.430	-4.710	11941.433	-4.500	-4.300
157.	18323.905	-0.160	3.940	12503.014	4.730	-4.620	11924.486	-4.620	-4.250
158.	18322.957	-0.180	3.860	12521.533	4.940	-4.510	11906.423	-5.000	-4.190
159.	18321.911	-0.200	3.770	12540.719	5.070	-4.400	11887.826	-5.160	-4.130
160.	18320.780	-0.210	3.660	12560.276	5.120	-4.270	11868.906	-5.240	-4.060
161.	18319.574	-0.220	3.550	12579.954	5.120	-4.140	11849.906	-5.240	-3.990
162.	18318.317	-0.230	3.430	12599.540	5.060	-3.990	11831.032	-5.100	-3.920
163.	18317.011	-0.240	3.300	12618.850	4.960	-3.830	11812.460	-5.090	-3.850
164.	18315.674	-0.240	3.160	12637.726	4.820	-3.670	11794.339	-4.960	-3.780
165.	18314.320	-0.240	3.010	12656.031	4.650	-3.490	11776.880	-4.790	-3.720
166.	18312.965	-0.240	2.850	12673.643	4.450	-3.300	11759.954	-4.590	-3.670
167.	18311.624	-0.240	2.680	12690.450	4.230	-3.110	11743.492	-4.360	-3.620
168.	18310.310	-0.230	2.510	12706.372	3.980	-2.910	11726.710	-4.110	-3.570
169.	18309.039	-0.220	2.330	12721.306	3.720	-2.690	11714.515	-3.840	-3.520
170.	18307.825	-0.210	2.140	12735.187	3.430	-2.470	11701.325	-3.550	-3.470
171.	18306.681	-0.200	1.940	12747.941	3.130	-2.250	11689.221	-3.240	-3.420
172.	18305.620	-0.160	1.740	12759.510	2.820	-2.020	11678.255	-2.920	-3.370
173.	18304.654	-0.160	1.540	12769.840	2.490	-1.780	11668.475	-2.580	-3.320
174.	18303.793	-0.140	1.320	12778.886	2.150	-1.530	11659.919	-2.230	-3.270
175.	18303.047	-0.120	1.110	12786.607	1.810	-1.280	11652.622	-1.870	-3.220
176.	18302.426	-0.100	.890	12792.969	1.460	-1.030	11646.614	-1.510	-3.170
177.	18301.935	-0.080	.670	12797.946	1.100	-0.780	11641.917	-1.140	-3.120
178.	18301.580	-0.050	.450	12801.516	.730	-0.520	11638.549	-0.760	-3.070
179.	18301.366	-0.030	.220	12803.664	.370	-0.260	11635.523	-0.380	-3.020
180.	18301.294	-0.000	-0.000	12804.381	0.000	-0.000	11635.647	0.000	-2.970

110-PLANE DIAMOND									
	LNVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
0.	18559.555	0.000	-0.000	12037.976	5.310	0.000	12037.961	-5.310	-0.000
1.	18558.985	-2.200	-0.000	12057.580	5.350	-0.000	12019.205	-4.910	-0.000
2.	18557.252	-4.10	-0.000	12077.384	5.390	0.000	12001.984	-4.480	-0.000
3.	18554.329	-6.20	-0.000	12097.346	5.420	0.000	11986.386	-4.040	-0.000
4.	18550.192	-8.60	0.000	12117.446	5.440	0.000	11972.483	-3.570	0.000
5.	18544.820	-1.060	0.000	12137.653	5.460	0.000	11960.331	-3.090	-0.000
6.	18538.197	-1.280	0.000	12157.944	5.470	0.000	11945.904	-2.590	0.000
7.	18530.310	-1.510	0.000	12178.295	5.470	-0.000	11941.491	-2.060	0.000
8.	18521.152	-1.740	-0.000	12196.679	5.470	0.000	11934.690	-1.550	-0.000
9.	18510.715	-1.960	-0.000	12219.072	5.460	-0.000	11930.215	-1.020	-0.000
10.	18499.009	-2.150	-0.000	12239.450	5.440	0.000	11927.486	-0.460	0.000
11.	18486.027	-2.420	-0.000	12259.788	5.420	0.000	11926.729	0.000	-0.000
12.	18471.781	-2.640	0.000	12280.060	5.390	0.000	11927.447	0.610	-0.000
13.	18456.282	-2.860	0.000	12300.243	5.360	0.000	11931.142	1.150	-0.000
14.	18439.547	-3.050	0.000	12320.313	5.320	0.000	11936.309	1.650	-0.000
15.	18421.596	-3.300	0.000	12340.246	5.270	0.000	11943.434	2.220	-0.000
16.	18402.453	-3.510	0.000	12360.818	5.210	0.000	11952.495	2.750	-0.000
17.	18382.149	-3.720	0.000	12379.606	5.150	-0.000	11963.461	3.260	-0.000
18.	18360.717	-3.920	-0.000	12398.987	5.090	0.000	11976.296	3.760	-0.000
19.	18338.194	-4.120	0.000	12418.138	5.020	0.000	11990.993	4.250	0.000
20.	18314.623	-4.310	-0.000	12437.038	4.940	-0.000	12007.379	4.720	0.000
21.	18290.051	-4.490	0.000	12455.664	4.860	-0.000	12025.512	5.160	-0.000
22.	18264.530	-4.660	0.000	12473.995	4.770	0.000	12045.283	5.590	0.000
23.	18238.116	-4.820	0.000	12492.011	4.680	0.000	12066.614	6.000	-0.000
24.	18210.876	-4.970	-0.000	12509.689	4.580	0.000	12089.422	6.360	-0.000
25.	18182.871	-5.110	-0.000	12527.011	4.480	0.000	12113.615	6.700	0.000
26.	18154.174	-5.230	-0.000	12543.957	4.380	0.000	12139.092	7.020	-0.000
27.	18124.863	-5.340	-0.000	12560.506	4.260	0.000	12165.748	7.300	-0.000
28.	18095.021	-5.440	-0.000	12576.645	4.150	0.000	12193.468	7.550	0.000
29.	18064.735	-5.520	-0.000	12592.350	4.030	0.000	12222.132	7.770	0.000
30.	18034.098	-5.590	0.000	12607.606	3.910	0.000	12251.613	7.950	0.000
31.	18003.209	-5.630	-0.000	12622.395	3.780	0.000	12281.776	8.050	0.000
32.	17972.171	-5.660	-0.000	12636.702	3.650	0.000	12312.485	8.190	-0.000
33.	17941.094	-5.660	-0.000	12650.511	3.510	0.000	12343.589	8.250	-0.000
34.	17910.090	-5.650	-0.000	12663.806	3.370	0.000	12374.940	8.200	-0.000
35.	17879.280	-5.610	-0.000	12676.572	3.230	0.000	12406.382	8.200	-0.000
36.	17848.787	-5.550	-0.000	12688.797	3.090	0.000	12437.752	8.200	-0.000
37.	17818.738	-5.470	0.000	12700.467	2.940	0.000	12468.888	8.100	0.000
38.	17789.266	-5.360	-0.000	12711.956	2.790	0.000	12499.820	7.950	0.000
39.	17760.505	-5.230	0.000	12722.090	2.640	-0.000	12529.779	7.760	-0.000
40.	17732.591	-5.070	-0.000	12732.020	2.480	0.000	12559.193	7.530	-0.000
41.	17705.665	-4.880	0.000	12741.348	2.320	0.000	12587.690	7.260	-0.000
42.	17679.867	-4.670	-0.000	12750.064	2.160	0.000	12615.096	6.940	-0.000
43.	17655.334	-4.430	0.000	12758.156	2.000	-0.000	12641.243	6.560	-0.000
44.	17632.206	-4.160	0.000	12765.622	1.840	0.000	12665.964	6.160	-0.000
45.	17610.617	-3.870	0.000	12772.446	1.670	0.000	12689.096	5.750	0.000
46.	17590.697	-3.550	0.000	12778.629	1.500	0.000	12710.487	5.270	-0.000
47.	17572.570	-3.210	0.000	12784.158	1.340	-0.000	12729.986	4.760	-0.000
48.	17556.353	-2.840	0.000	12789.028	1.170	0.000	12747.454	4.220	0.000
49.	17542.153	-2.460	0.000	12793.236	0.990	0.000	12762.775	3.650	0.000

BULK

110-PLANE DIAMOND

	LNQVEL	LPM12	LPM13	FSPVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
50.	17530.067	-2.060	0.000	12756.776	.620	0.000	12775.626	3.050	-0.000
51.	17520.177	-1.640	0.000	12799.645	.656	0.000	12786.515	2.430	-0.000
52.	17512.553	-1.210	0.000	12801.839	.480	0.000	12794.759	1.800	0.000
53.	17507.250	-1.770	0.000	12803.357	.300	0.000	12800.496	1.150	-0.000
54.	17504.307	-3.300	0.000	12804.197	.130	0.000	12803.681	.450	-0.000
55.	17503.744	.120	0.000	12804.357	-.050	-0.000	12804.291	-.050	-0.000
56.	17505.565	.560	0.000	12803.838	-.220	-0.000	12802.319	-.840	-0.000
57.	17509.756	1.010	0.000	12802.640	-.390	-0.000	12797.762	-1.490	-0.000
58.	17516.292	1.440	0.000	12800.765	-.570	-0.000	12790.715	-2.130	-0.000
59.	17525.120	1.660	0.000	12798.214	-.740	-0.000	12781.171	-2.760	-0.000
60.	17536.180	2.270	0.000	12794.990	-.910	-0.000	12769.224	-3.370	-0.000
61.	17549.394	2.670	0.000	12791.047	-1.060	-0.000	12754.463	-3.950	-0.000
62.	17564.671	3.040	0.000	12766.539	-1.260	0.000	12738.493	-4.510	0.000
63.	17581.910	3.390	0.000	12761.320	-1.420	0.000	12719.935	-5.040	-0.000
64.	17600.999	3.720	0.000	12775.466	-1.590	-0.000	12699.420	-5.530	-0.000
65.	17621.816	4.020	0.000	12768.924	-1.760	0.000	12677.091	-5.980	-0.000
66.	17644.235	4.300	0.000	12761.760	-1.920	0.000	12653.049	-6.400	-0.000
67.	17668.121	4.560	0.000	12753.962	-2.090	-0.000	12627.605	-6.760	-0.000
68.	17693.339	4.780	0.000	12745.539	-2.250	-0.000	12600.772	-7.110	-0.000
69.	17719.751	4.980	0.000	12736.496	-2.410	-0.000	12572.768	-7.410	-0.000
70.	17747.215	5.160	0.000	12726.851	-2.560	0.000	12543.766	-7.660	-0.000
71.	17775.594	5.300	0.000	12716.607	-2.720	-0.000	12513.937	-7.870	-0.000
72.	17804.747	5.420	0.000	12705.778	-2.870	-0.000	12483.454	-8.030	-0.000
73.	17834.541	5.520	0.000	12694.375	-3.020	0.000	12452.468	-8.160	-0.000
74.	17864.840	5.590	-0.000	12682.411	-3.170	0.000	12421.207	-8.240	-0.000
75.	17895.517	5.640	0.000	12669.896	-3.310	-0.000	12389.779	-8.270	-0.000
76.	17926.444	5.660	0.000	12656.851	-3.450	0.000	12356.366	-8.270	-0.000
77.	17957.501	5.660	0.000	12643.283	-3.580	0.000	12327.126	-8.230	-0.000
78.	17988.571	5.650	0.000	12629.209	-3.720	0.000	12296.212	-8.140	-0.000
79.	18019.544	5.610	0.000	12614.666	-3.850	-0.000	12265.774	-8.020	0.000
80.	18050.312	5.550	0.000	12599.606	-3.970	-0.000	12235.954	-7.860	0.000
81.	18080.776	5.480	0.000	12584.113	-4.090	0.000	12206.888	-7.660	-0.000
82.	18110.839	5.390	0.000	12568.177	-4.210	-0.000	12176.706	-7.420	-0.000
83.	18140.411	5.250	-0.000	12551.620	-4.320	0.000	12151.534	-7.160	-0.000
84.	18169.407	5.170	0.000	12535.056	-4.430	-0.000	12125.486	-6.860	-0.000
85.	18197.748	5.040	-0.000	12517.911	-4.540	0.000	12100.675	-6.530	-0.000
86.	18225.359	4.890	0.000	12500.338	-4.640	0.000	12077.201	-6.170	-0.000
87.	18252.171	4.740	0.000	12482.539	-4.730	0.000	12055.162	-5.760	-0.000
88.	18278.120	4.570	0.000	12464.355	-4.820	0.000	12034.664	-5.370	-0.000
89.	18303.146	4.390	0.000	12445.865	-4.900	0.000	11998.489	-4.970	-0.000
90.	18327.196	4.210	0.000	12427.092	-4.960	0.000	11968.990	-4.000	-0.000
91.	18350.219	4.020	-0.000	12408.056	-5.060	0.000	11942.269	-3.500	-0.000
92.	18372.172	3.820	-0.000	12388.781	-5.120	0.000	11919.436	-2.990	-0.000
93.	18393.013	3.610	0.000	12369.288	-5.190	0.000	11897.471	-2.470	-0.000
94.	18412.707	3.400	0.000	12349.600	-5.260	0.000	11873.429	-1.940	-0.000
95.	18431.224	3.190	0.000	12329.740	-5.290	0.000	11848.336	-1.410	-0.000
96.	18448.536	2.970	-0.000	12309.732	-5.340	0.000	11823.208	-.860	-0.000
97.	18464.620	2.750	0.000	12289.599	-5.380	0.000	11797.057	-.320	-0.000
98.	18479.460	2.520	0.000	12269.366	-5.410	-0.000	11926.084	.220	-0.000
99.	18493.040	2.300	-0.000	12249.056	-5.430	0.000			

110-PLANE DIAMOND

	LMGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	10505.351	2.070	-0.000	1220.694	-5.450	0.000	11920.604	.770	-0.000
101.	10516.307	1.640	-0.000	1200.305	-5.470	0.000	11932.442	1.300	0.000
102.	10526.147	1.620	0.000	12107.913	-5.470	0.000	11938.137	1.630	-0.000
103.	10534.632	1.390	-0.000	12167.544	-5.470	0.000	11945.742	2.350	-0.000
104.	10541.050	1.170	0.000	12147.221	-5.470	0.000	11955.219	2.450	-0.000
105.	10547.011	.940	0.000	12120.971	-5.450	0.000	11960.525	3.340	-0.000
106.	10552.529	.730	0.000	12106.019	-5.430	0.000	11979.610	3.620	-0.000
107.	10556.023	.510	0.000	12086.709	-5.410	0.000	11994.416	4.270	-0.000
108.	10558.314	.300	-0.000	12066.906	-5.370	0.000	12010.079	4.710	-0.000
109.	10559.429	.090	-0.000	12047.197	-5.330	0.000	12020.928	5.120	-0.000
110.	10559.398	-1.100	0.000	12027.604	-5.260	-0.000	12040.495	5.510	0.000
111.	10558.256	-1.300	0.000	12008.394	-5.230	-0.000	12069.466	5.670	0.000
112.	10556.039	-1.400	0.000	11989.351	-5.160	0.000	12091.708	6.210	0.000
113.	10552.790	-1.660	0.000	11970.580	-5.100	-0.000	12115.348	6.520	0.000
114.	10548.954	-1.630	0.000	11952.103	-5.020	0.000	12140.051	6.790	0.000
115.	10543.360	-1.000	0.000	11933.947	-4.940	-0.000	12162.754	7.040	0.000
116.	10537.322	-1.150	0.000	11916.133	-4.850	0.000	12192.454	7.250	0.000
117.	10530.435	-1.290	0.000	11898.606	-4.750	0.000	12219.930	7.440	0.000
118.	10522.700	-1.420	0.000	11881.625	-4.650	0.000	12240.110	7.590	-0.000
119.	10514.421	-1.540	0.000	11864.903	-4.540	-0.000	12270.042	7.700	0.000
120.	10505.425	-1.650	0.000	11846.771	-4.420	0.000	12300.028	7.790	-0.000
121.	10495.061	-1.740	0.000	11833.015	-4.300	-0.000	12335.532	7.830	0.000
122.	10485.803	-1.830	0.000	11817.735	-4.170	0.000	12365.221	7.850	0.000
123.	10475.326	-1.690	0.000	11802.952	-4.030	0.000	12394.483	7.820	0.000
124.	10464.504	-1.950	0.000	11748.607	-3.840	-0.000	12424.623	7.770	-0.000
125.	10453.432	-1.990	0.000	11774.957	-3.750	0.000	12454.003	7.670	-0.000
126.	10442.170	-2.010	0.000	11761.762	-3.590	-0.000	12483.186	7.550	0.000
127.	10430.032	-2.020	0.000	11749.181	-3.440	0.000	12511.741	7.360	0.000
128.	10419.477	-2.020	0.000	11737.169	-3.270	0.000	12539.705	7.190	0.000
129.	10408.199	-2.000	0.000	11725.764	-3.100	-0.000	12566.906	6.960	-0.000
130.	10397.086	-1.960	0.000	11714.981	-2.930	0.000	12593.210	6.700	0.000
131.	10386.221	-1.910	0.000	11704.835	-2.750	-0.000	12618.446	6.400	-0.000
132.	10375.089	-1.850	0.000	11695.340	-2.570	0.000	12642.608	6.000	0.000
133.	10365.573	-1.770	-0.000	11686.510	-2.380	0.000	12665.423	5.730	-0.000
134.	10355.952	-1.670	0.000	11678.356	-2.190	-0.000	12686.902	5.340	0.000
135.	10346.905	-1.560	0.000	11670.890	-2.000	0.000	12706.043	4.940	-0.000
136.	10338.505	-1.440	0.000	11664.122	-1.800	0.000	12725.170	4.500	0.000
137.	10330.619	-1.310	0.000	11658.062	-1.610	0.000	12744.786	4.050	-0.000
138.	10323.913	-1.160	0.000	11652.715	-1.400	-0.000	12764.599	3.570	0.000
139.	10317.043	-1.010	0.000	11648.099	-1.200	-0.000	12783.529	3.070	-0.000
140.	10312.061	-850	0.000	11644.210	-990	0.000	12780.504	2.560	0.000
141.	10308.411	-660	0.000	11641.056	-790	-0.000	12789.463	2.040	0.000
142.	10305.129	-500	-0.000	11638.643	-560	0.000	12796.355	1.500	-0.000
143.	10302.043	-320	0.000	11636.973	-370	0.000	12801.143	.960	0.000
144.	10301.573	-140	0.000	11636.050	-160	-0.000	12803.794	.410	-0.000
145.	10301.130	-60	0.000	11635.873	-60	0.000	12804.306	-.150	0.000
146.	10302.116	.230	0.000	11636.444	.270	0.000	12802.603	-.700	0.000
147.	10303.924	.420	0.000	11637.762	.480	0.000	12798.879	-1.240	0.000
148.	10306.739	.590	0.000	11639.625	.690	0.000	12792.976	-1.760	0.000
149.	10310.536	.770	0.000	11642.029	.890	0.000	12784.907	-2.310	0.000

110-PLANE DIAMOND									
	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	BULK	SSPM12	SSPM13
150.	18315.284	.930	0.000	11846.172	1.100	0.000	SSRVEL	-2.630	0.000
151.	18320.940	1.090	0.000	11650.448	1.310	-0.000	12774.957	-3.340	0.000
152.	18327.459	1.240	0.000	11655.451	1.510	0.000	12762.941	-3.620	0.000
153.	18334.784	1.380	0.000	11661.173	1.710	0.000	12749.007	-4.290	0.000
154.	18342.055	1.510	0.000	11667.606	1.910	0.000	12733.232	-4.730	0.000
155.	18351.806	1.620	0.000	11674.745	2.100	0.000	12715.701	-5.150	0.000
156.	18360.965	1.720	0.000	11682.576	2.300	0.000	12696.509	-5.520	0.000
157.	18370.857	1.810	0.000	11691.089	2.480	0.000	12675.758	-5.920	0.000
158.	18381.203	1.860	0.000	11700.271	2.670	0.000	12653.557	-6.260	0.000
159.	18391.921	1.940	0.000	11710.112	2.850	0.000	12630.023	-6.560	0.000
160.	18402.928	1.960	0.000	11720.596	3.020	-0.000	12605.276	-6.840	0.000
161.	18414.139	2.010	0.000	11731.709	3.190	0.000	12579.441	-7.080	0.000
162.	18425.466	2.020	0.000	11743.437	3.360	0.000	12552.647	-7.300	0.000
163.	18436.829	2.020	0.000	11755.762	3.520	0.000	12525.027	-7.470	0.000
164.	18448.137	2.000	0.000	11768.668	3.670	0.000	12496.714	-7.620	0.000
165.	18459.308	1.970	0.000	11782.138	3.820	-0.000	12467.644	-7.730	0.000
166.	18470.258	1.920	0.000	11796.153	3.970	0.000	12438.554	-7.800	0.000
167.	18480.905	1.860	0.000	11810.694	4.110	0.000	12408.961	-7.840	0.000
168.	18491.170	1.780	0.000	11825.742	4.240	-0.000	12379.261	-7.840	0.000
169.	18500.777	1.650	0.000	11841.276	4.360	0.000	12349.530	-7.810	0.000
170.	18510.250	1.590	0.000	11857.276	4.460	0.000	12319.922	-7.750	0.000
171.	18518.919	1.460	0.000	11873.719	4.600	0.000	12290.570	-7.650	0.000
172.	18526.914	1.350	0.000	11890.565	4.700	-0.000	12261.603	-7.510	0.000
173.	18534.171	1.220	0.000	11907.851	4.800	0.000	12233.186	-7.350	0.000
174.	18540.627	1.070	0.000	11925.495	4.890	-0.000	12205.329	-7.150	0.000
175.	18546.226	.910	-0.000	11943.492	4.960	0.000	12176.266	-6.910	0.000
176.	18550.911	.750	0.000	11961.821	5.060	-0.000	12152.077	-6.640	0.000
177.	18554.631	.570	0.000	11980.456	5.130	-0.000	12126.872	-6.360	0.000
178.	18557.341	.390	0.000	11999.374	5.200	0.000	12102.760	-6.030	0.000
179.	18558.995	.200	0.000	12018.550	5.260	0.000	12079.042	-5.680	0.000
180.	18559.555	0.000	0.000	12037.961	5.310	0.000	12050.217	-5.310	-0.000

2-PLANE (XY-PLANE) EUROPIUM IRON GARNET

	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
0.	6322.037	0.000	0.000	3403.354	0.000	0.000	3403.354	0.000	0.000
1.	6322.103	0.070	0.000	3403.354	-0.000	0.000	3403.354	0.000	0.000
2.	6322.301	1.140	0.000	3403.354	0.000	0.000	3402.876	-2.300	0.000
3.	6322.629	2.000	0.000	3403.354	0.000	0.000	3402.280	-4.650	0.000
4.	6323.086	2.700	0.000	3403.354	0.000	0.000	3401.451	-6.690	0.000
5.	6323.669	3.400	0.000	3403.354	0.000	0.000	3400.391	-8.590	0.000
6.	6324.376	4.000	0.000	3403.354	0.000	0.000	3479.107	-1.110	0.000
7.	6325.202	4.600	0.000	3403.354	0.000	0.000	3477.605	-1.320	0.000
8.	6326.143	5.200	0.000	3403.354	0.000	0.000	3475.692	-1.520	0.000
9.	6327.195	5.700	0.000	3403.354	0.000	0.000	3473.376	-1.710	0.000
10.	6328.352	6.300	0.000	3403.354	0.000	0.000	3471.869	-1.900	0.000
11.	6329.607	6.600	0.000	3403.354	0.000	0.000	3469.579	-2.080	0.000
12.	6330.955	7.200	0.000	3403.354	0.000	0.000	3467.119	-2.250	0.000
13.	6332.369	7.600	0.000	3403.354	0.000	0.000	3464.501	-2.400	0.000
14.	6333.900	8.000	0.000	3403.354	0.000	0.000	3461.737	-2.550	0.000
15.	6335.462	8.400	0.000	3403.354	0.000	0.000	3458.841	-2.600	0.000
16.	6337.126	8.700	0.000	3403.354	0.000	0.000	3455.628	-2.600	0.000
17.	6338.823	8.900	0.000	3403.354	0.000	0.000	3452.713	-2.510	0.000
18.	6340.567	9.100	0.000	3403.354	0.000	0.000	3449.511	-3.000	0.000
19.	6342.347	9.300	0.000	3403.354	0.000	0.000	3446.237	-3.080	0.000
20.	6344.155	9.400	0.000	3403.354	0.000	0.000	3442.907	-3.140	0.000
21.	6345.982	9.500	0.000	3403.354	0.000	0.000	3439.539	-3.190	0.000
22.	6347.816	9.500	0.000	3403.354	0.000	0.000	3436.148	-3.220	0.000
23.	6349.656	9.500	0.000	3403.354	0.000	0.000	3432.751	-3.240	0.000
24.	6351.486	9.400	0.000	3403.354	0.000	0.000	3429.364	-3.240	0.000
25.	6353.299	9.300	0.000	3403.354	0.000	0.000	3426.005	-3.230	0.000
26.	6355.086	9.200	0.000	3403.354	0.000	0.000	3422.688	-3.200	0.000
27.	6356.835	9.000	0.000	3403.354	0.000	0.000	3419.431	-3.150	0.000
28.	6358.550	8.700	0.000	3403.354	0.000	0.000	3416.240	-3.090	0.000
29.	6360.210	8.400	0.000	3403.354	0.000	0.000	3413.157	-3.010	0.000
30.	6361.812	8.100	0.000	3403.354	0.000	0.000	3410.170	-2.920	0.000
31.	6363.346	7.700	0.000	3403.354	0.000	0.000	3407.303	-2.820	0.000
32.	6364.811	7.300	0.000	3403.354	0.000	0.000	3404.569	-2.700	0.000
33.	6366.195	6.900	0.000	3403.354	0.000	0.000	3401.981	-2.570	0.000
34.	6367.492	6.500	0.000	3403.354	0.000	0.000	3399.553	-2.420	0.000
35.	6368.697	6.000	0.000	3403.354	0.000	0.000	3397.294	-2.260	0.000
36.	6369.804	5.400	0.000	3403.354	0.000	0.000	3395.217	-2.100	0.000
37.	6370.809	4.900	0.000	3403.354	0.000	0.000	3393.332	-1.920	0.000
38.	6371.707	4.300	0.000	3403.354	0.000	0.000	3391.646	-1.730	0.000
39.	6372.493	3.800	0.000	3403.354	0.000	0.000	3390.169	-1.530	0.000
40.	6373.164	3.200	0.000	3403.354	0.000	0.000	3388.906	-1.330	0.000
41.	6373.718	2.500	0.000	3403.354	0.000	0.000	3387.865	-1.120	0.000
42.	6374.151	1.900	0.000	3403.354	0.000	0.000	3387.050	-0.900	0.000
43.	6374.462	1.300	0.000	3403.354	0.000	0.000	3386.465	-0.680	0.000
44.	6374.649	0.600	0.000	3403.354	0.000	0.000	3386.113	-0.450	0.000
45.	6374.711	0.000	0.000	3403.354	0.000	0.000	3385.996	-0.230	0.000
46.	6374.649	-0.600	0.000	3403.354	0.000	0.000	3386.113	0.000	0.000
47.	6374.462	-1.300	0.000	3403.354	0.000	0.000	3386.465	0.230	0.000
48.	6374.151	-1.900	0.000	3403.354	0.000	0.000	3387.050	0.450	0.000
49.	6373.718	-2.500	0.000	3403.354	0.000	0.000	3387.865	0.680	0.000

Z-PLANE (XY-PLANE) EUROPIUM IRON GARNET

	LMGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
50.	6373.164	-320	0.000	3483.354	0.000	0.000	3388.906	1.120	0.000
51.	6372.493	-360	0.000	3483.354	-0.000	0.000	3390.169	1.330	0.000
52.	6371.707	-430	0.000	3483.354	0.000	0.000	3391.646	1.530	0.000
53.	6370.809	-490	0.000	3483.354	0.000	0.000	3393.332	1.730	0.000
54.	6369.804	-540	0.000	3483.354	0.000	0.000	3395.217	1.920	0.000
55.	6368.697	-600	0.000	3483.354	-0.000	0.000	3397.294	2.100	0.000
56.	6367.492	-650	0.000	3483.354	-0.000	0.000	3399.553	2.280	0.000
57.	6366.195	-690	0.000	3483.354	-0.000	0.000	3401.981	2.420	0.000
58.	6364.811	-730	0.000	3483.354	-0.000	0.000	3404.569	2.570	0.000
59.	6363.348	-770	0.000	3483.354	0.000	0.000	3407.303	2.700	0.000
60.	6361.812	-810	0.000	3483.354	0.000	0.000	3410.170	2.820	0.000
61.	6360.210	-840	0.000	3483.354	-0.000	0.000	3413.177	2.920	0.000
62.	6358.550	-870	0.000	3483.354	-0.000	0.000	3416.246	3.010	0.000
63.	6356.839	-900	0.000	3483.354	0.000	0.000	3419.431	3.090	0.000
64.	6355.086	-920	0.000	3483.354	0.000	0.000	3422.688	3.150	0.000
65.	6353.299	-930	0.000	3483.354	-0.000	0.000	3426.005	3.200	0.000
66.	6351.466	-940	0.000	3483.354	0.000	0.000	3429.364	3.230	0.000
67.	6349.656	-950	0.000	3483.354	0.000	0.000	3432.751	3.240	0.000
68.	6347.818	-950	0.000	3483.354	0.000	0.000	3436.146	3.240	0.000
69.	6345.982	-950	0.000	3483.354	-0.000	0.000	3439.539	3.220	0.000
70.	6344.155	-940	0.000	3483.354	-0.000	0.000	3442.907	3.190	0.000
71.	6342.347	-930	0.000	3483.354	0.000	0.000	3446.237	3.140	0.000
72.	6340.567	-910	0.000	3483.354	-0.000	0.000	3449.511	3.080	0.000
73.	6338.823	-890	0.000	3483.354	0.000	0.000	3452.713	3.000	0.000
74.	6337.126	-870	0.000	3483.354	0.000	0.000	3455.828	2.910	0.000
75.	6335.482	-840	0.000	3483.354	0.000	0.000	3458.861	2.800	0.000
76.	6333.900	-800	0.000	3483.354	0.000	0.000	3461.737	2.680	0.000
77.	6332.389	-760	0.000	3483.354	0.000	0.000	3464.501	2.550	0.000
78.	6330.955	-720	0.000	3483.354	0.000	0.000	3467.119	2.400	0.000
79.	6329.607	-660	0.000	3483.354	0.000	0.000	3469.579	2.250	0.000
80.	6328.352	-630	0.000	3483.354	0.000	0.000	3471.859	2.080	0.000
81.	6327.195	-570	0.000	3483.354	0.000	0.000	3473.976	1.900	0.000
82.	6326.143	-520	0.000	3483.354	0.000	0.000	3475.892	1.710	0.000
83.	6325.202	-460	0.000	3483.354	-0.000	0.000	3477.605	1.520	0.000
84.	6324.376	-400	0.000	3483.354	-0.000	0.000	3479.107	1.320	0.000
85.	6323.669	-340	0.000	3483.354	-0.000	0.000	3480.351	1.110	0.000
86.	6323.066	-270	0.000	3483.354	0.000	0.000	3481.451	.890	0.000
87.	6322.629	-200	0.000	3483.354	0.000	0.000	3482.280	.670	0.000
88.	6322.301	-140	0.000	3483.354	-0.000	0.000	3482.876	.450	0.000
89.	6322.103	-070	0.000	3483.354	0.000	0.000	3483.235	.230	0.000
90.	6322.037	0.000	0.000	3483.354	-0.000	0.000	3483.354	0.000	0.000
91.	6322.183	.070	0.000	3483.354	0.000	0.000	3483.235	-.230	0.000
92.	6322.301	.140	0.000	3483.354	0.000	0.000	3482.876	-.450	0.000
93.	6322.629	.200	0.000	3483.354	0.000	0.000	3482.280	-.670	0.000
94.	6323.086	.270	0.000	3483.354	0.000	0.000	3481.451	-.890	0.000
95.	6323.669	.340	0.000	3483.354	0.000	0.000	3480.391	-1.110	0.000
96.	6324.376	.400	0.000	3483.354	0.000	0.000	3479.107	-1.320	0.000
97.	6325.202	.460	0.000	3483.354	0.000	0.000	3477.605	-1.520	0.000
98.	6326.143	.520	0.000	3483.354	0.000	0.000	3475.892	-1.710	0.000
99.	6327.195	.570	0.000	3483.354	-0.000	0.000	3473.976	-1.900	0.000

Z-PLANE (XY-PLANE) EUROPIUM IRON GARNET

	LNGVEL	LPM112	LPM113	FSRVEL	FSPM112	FSPM113	SSRVEL	SSPM112	SSPM113
108.	6328.352	.630	0.000	3463.354	0.000	0.000	3471.669	-2.060	0.000
109.	6329.607	.680	0.000	3463.354	0.000	0.000	3469.574	-2.250	0.000
110.	6330.955	.720	0.000	3463.354	0.000	0.000	3467.119	-2.400	0.000
111.	6332.389	.760	0.000	3463.354	-0.000	0.000	3464.501	-2.550	0.000
112.	6333.900	.800	0.000	3463.354	0.000	0.000	3461.737	-2.600	0.000
113.	6335.462	.840	0.000	3463.354	0.000	0.000	3458.841	-2.600	0.000
114.	6337.126	.870	0.000	3463.354	0.000	0.000	3455.828	-2.910	0.000
115.	6338.823	.890	0.000	3463.354	0.000	0.000	3452.713	-3.000	0.000
116.	6340.567	.910	0.000	3463.354	0.000	0.000	3449.511	-3.040	0.000
117.	6342.347	.930	0.000	3463.354	0.000	0.000	3446.237	-3.140	0.000
118.	6344.155	.940	0.000	3463.354	0.000	0.000	3442.907	-3.190	0.000
119.	6345.982	.950	0.000	3463.354	0.000	0.000	3439.539	-3.220	0.000
120.	6347.816	.950	0.000	3463.354	0.000	0.000	3436.140	-3.240	0.000
121.	6349.656	.950	0.000	3463.354	0.000	0.000	3432.751	-3.240	0.000
122.	6351.486	.940	0.000	3463.354	0.000	0.000	3429.364	-3.230	0.000
123.	6353.299	.930	0.000	3463.354	0.000	0.000	3426.005	-3.200	0.000
124.	6355.086	.920	0.000	3463.354	0.000	0.000	3422.688	-3.150	0.000
125.	6356.839	.900	0.000	3463.354	0.000	0.000	3419.431	-3.090	0.000
126.	6358.550	.870	0.000	3463.354	0.000	0.000	3416.240	-3.010	0.000
127.	6360.210	.840	0.000	3463.354	0.000	0.000	3413.157	-2.920	0.000
128.	6361.812	.810	0.000	3463.354	0.000	0.000	3410.170	-2.820	0.000
129.	6363.346	.770	0.000	3463.354	0.000	0.000	3407.303	-2.700	0.000
130.	6364.811	.730	0.000	3463.354	0.000	0.000	3404.569	-2.570	0.000
131.	6366.195	.690	0.000	3463.354	0.000	0.000	3401.981	-2.420	0.000
132.	6367.492	.650	0.000	3463.354	0.000	0.000	3399.553	-2.260	0.000
133.	6368.697	.600	0.000	3463.354	0.000	0.000	3397.294	-2.100	0.000
134.	6369.804	.540	0.000	3463.354	0.000	0.000	3395.217	-1.920	0.000
135.	6370.809	.490	0.000	3463.354	0.000	0.000	3393.332	-1.730	0.000
136.	6371.787	.430	0.000	3463.354	-0.000	0.000	3391.646	-1.530	0.000
137.	6372.693	.360	0.000	3463.354	0.000	0.000	3390.169	-1.330	0.000
138.	6373.164	.320	0.000	3463.354	0.000	0.000	3388.906	-1.120	0.000
139.	6373.716	.250	0.000	3463.354	0.000	0.000	3387.869	-900	0.000
140.	6374.151	.190	0.000	3463.354	0.000	0.000	3387.050	-680	0.000
141.	6374.662	.130	0.000	3463.354	0.000	0.000	3386.465	-450	0.000
142.	6374.849	.060	0.000	3463.354	0.000	0.000	3386.113	-230	0.000
143.	6374.711	0.000	0.000	3463.354	0.000	0.000	3385.996	-0.000	0.000
144.	6374.649	-.060	0.000	3463.354	0.000	0.000	3386.113	.230	0.000
145.	6374.462	-.130	0.000	3463.354	0.000	0.000	3386.465	.450	0.000
146.	6374.151	-.190	0.000	3463.354	0.000	0.000	3387.050	.680	0.000
147.	6373.716	-.250	0.000	3463.354	0.000	0.000	3387.869	.900	0.000
148.	6373.164	-.320	0.000	3463.354	0.000	0.000	3388.906	1.120	0.000
149.	6372.693	-.360	0.000	3463.354	0.000	0.000	3390.169	1.330	0.000
150.	6372.187	-.430	0.000	3463.354	-0.000	0.000	3391.646	1.530	0.000
151.	6371.787	-.490	0.000	3463.354	0.000	0.000	3393.332	1.730	0.000
152.	6371.409	-.540	0.000	3463.354	0.000	0.000	3395.217	1.920	0.000
153.	6371.004	-.600	0.000	3463.354	0.000	0.000	3397.294	2.100	0.000
154.	6370.697	-.680	0.000	3463.354	0.000	0.000	3399.553	2.260	0.000
155.	6370.492	-.730	0.000	3463.354	0.000	0.000	3401.981	2.420	0.000
156.	6370.346	-.770	0.000	3463.354	-0.000	0.000	3404.569	2.570	0.000
157.	6370.151						3407.303	2.700	0.000

BULK

Z-PLANE (XY-PLANE) EUROPIUM IRON GARNET									
	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SRVEL	SSPHI12	SSPHI13
150.	6351.512	-0.010	0.000	3483.354	0.000	0.000	3410.170	2.620	0.000
151.	6350.216	-0.040	0.000	3483.354	0.000	0.000	3413.157	2.920	0.000
152.	6358.550	-0.070	0.000	3483.354	-0.000	0.000	3416.248	3.010	0.000
153.	6356.039	-0.900	0.000	3483.354	0.000	0.000	3419.431	3.090	0.000
154.	6355.086	-0.920	0.000	3483.354	0.000	0.000	3422.688	3.150	0.000
155.	6353.299	-0.930	0.000	3483.354	0.000	0.000	3426.005	3.200	0.000
156.	6351.486	-0.940	0.000	3483.354	0.000	0.000	3429.364	3.230	0.000
157.	6349.656	-0.950	0.000	3483.354	-0.000	0.000	3432.751	3.240	0.000
158.	6347.818	-0.950	0.000	3483.354	-0.000	0.000	3436.148	3.240	0.000
159.	6345.982	-0.950	0.000	3483.354	-0.000	0.000	3439.539	3.220	0.000
160.	6344.155	-0.940	0.000	3483.354	0.000	0.000	3442.927	3.150	0.000
161.	6342.347	-0.930	0.000	3483.354	0.000	0.000	3446.317	3.140	0.000
162.	6340.567	-0.910	0.000	3483.354	0.000	0.000	3449.711	3.060	0.000
163.	6338.823	-0.890	0.000	3483.354	0.000	0.000	3452.713	3.000	0.000
164.	6337.126	-0.870	0.000	3483.354	0.000	0.000	3455.828	2.910	0.000
165.	6335.482	-0.840	0.000	3483.354	0.000	0.000	3458.841	2.800	0.000
166.	6333.900	-0.800	0.000	3483.354	0.000	0.000	3461.737	2.660	0.000
167.	6332.389	-0.760	0.000	3483.354	0.000	0.000	3464.501	2.550	0.000
168.	6330.955	-0.720	0.000	3483.354	0.000	0.000	3467.119	2.400	0.000
169.	6329.687	-0.660	0.000	3483.354	-0.000	0.000	3469.579	2.250	0.000
170.	6328.352	-0.630	0.000	3483.354	0.000	0.000	3471.869	2.080	0.000
171.	6327.195	-0.570	0.000	3483.354	0.000	0.000	3473.976	1.900	0.000
172.	6326.143	-0.520	0.000	3483.354	-0.000	0.000	3475.892	1.710	0.000
173.	6325.202	-0.460	0.000	3483.354	0.000	0.000	3477.605	1.520	0.000
174.	6324.376	-0.400	0.000	3483.354	0.000	0.000	3479.107	1.320	0.000
175.	6323.669	-0.340	0.000	3483.354	0.000	0.000	3480.391	1.110	0.000
176.	6323.086	-0.270	0.000	3483.354	0.000	0.000	3481.451	0.890	0.000
177.	6322.629	-0.260	0.000	3483.354	-0.000	0.000	3482.280	0.670	0.000
178.	6322.301	-0.140	0.000	3483.354	-0.000	0.000	3482.876	0.450	0.000
179.	6322.103	-0.070	0.000	3483.354	0.000	0.000	3483.235	0.230	0.000
180.	6322.037	0.000	0.000	3483.354	-0.000	0.000	3483.354	0.000	0.000

111-PLANE EUROPIUM IRON GARNET

	LNVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
0.	6374.711	-0.000	0.000	3403.354	-0.000	0.000	3305.996	0.000	-0.000
1.	6374.712	0.000	0.050	3403.295	-1.10	-0.00	3306.055	1.10	-0.00
2.	6374.714	0.000	0.090	3403.119	-2.20	-1.60	3306.233	.230	-1.60
3.	6374.716	0.000	0.140	3402.825	-3.30	-2.30	3306.528	.340	-2.40
4.	6374.729	0.000	0.180	3402.416	-4.40	-3.10	3306.939	.450	-3.20
5.	6374.737	0.000	0.230	3401.892	-5.50	-3.50	3307.466	.570	-4.00
6.	6374.746	0.000	0.270	3401.256	-6.50	-4.60	3308.105	.670	-4.70
7.	6374.756	0.000	0.310	3400.516	-7.50	-5.40	3308.855	.780	-5.50
8.	6374.767	-0.010	0.360	3400.557	-8.50	-6.18	3309.712	.800	-6.20
9.	6374.779	-0.010	0.400	3400.700	-9.50	-6.60	3309.674	.900	-6.50
10.	6374.791	-0.010	0.440	3400.843	-1.040	-7.50	3391.735	1.070	-7.60
11.	6374.804	-0.010	0.480	3406.491	-1.130	-8.20	3392.092	1.160	-8.30
12.	6374.818	-0.010	0.520	3405.249	-1.210	-8.80	3394.140	1.250	-9.00
13.	6374.832	-0.010	0.550	3403.922	-1.290	-9.50	3395.472	1.330	-9.60
14.	6374.846	-0.010	0.590	3402.517	-1.360	-1.010	3396.863	1.400	-1.020
15.	6374.860	-0.010	0.620	3401.041	-1.430	-1.060	3398.365	1.460	-1.060
16.	6374.874	-0.010	0.650	3400.503	-1.480	-1.120	3399.909	1.520	-1.130
17.	6374.887	-0.010	0.680	3400.910	-1.530	-1.170	3401.507	1.560	-1.160
18.	6374.901	-0.010	0.710	3406.276	-1.560	-1.220	3403.147	1.600	-1.230
19.	6374.915	-0.010	0.740	3404.610	-1.590	-1.260	3404.818	1.620	-1.270
20.	6374.929	-0.010	0.760	3402.929	-1.600	-1.310	3406.504	1.630	-1.310
21.	6374.943	-0.010	0.780	3401.250	-1.590	-1.350	3408.189	1.620	-1.350
22.	6374.957	0.000	0.800	3400.592	-1.550	-1.360	3409.651	1.580	-1.360
23.	6374.971	0.000	0.820	3400.981	-1.500	-1.410	3411.467	1.520	-1.410
24.	6374.985	0.000	0.840	3406.446	-1.410	-1.440	3413.005	1.430	-1.440
25.	6374.999	0.000	0.850	3405.025	-1.280	-1.460	3414.429	1.300	-1.460
26.	6374.969	0.000	0.860	3403.758	-1.110	-1.460	3415.694	1.130	-1.460
27.	6374.974	0.000	0.870	3402.696	-900	-1.500	3416.763	.910	-1.440
28.	6374.976	0.000	0.870	3401.888	-630	-1.510	3417.573	.640	-1.500
29.	6374.980	0.000	0.880	3401.380	-330	-1.510	3418.081	.330	-1.510
30.	6374.980	-0.000	0.880	3401.207	0.000	-1.520	3418.255	0.000	-1.510
31.	6374.980	-0.000	0.880	3401.340	.330	-1.510	3418.081	.330	-1.510
32.	6374.977	-0.000	0.870	3401.688	.630	-1.510	3417.573	.640	-1.500
33.	6374.974	-0.000	0.870	3402.696	.900	-1.500	3416.763	.910	-1.490
34.	6374.969	-0.000	0.860	3403.758	1.110	-1.460	3415.694	1.130	-1.460
35.	6374.962	-0.000	0.850	3405.025	1.260	-1.460	3414.429	1.300	-1.460
36.	6374.955	-0.000	0.840	3406.446	1.410	-1.440	3413.005	1.430	-1.440
37.	6374.946	-0.000	0.820	3407.981	1.500	-1.410	3411.467	1.520	-1.410
38.	6374.936	-0.010	0.800	3409.592	1.550	-1.380	3409.651	1.580	-1.380
39.	6374.925	-0.010	0.780	3401.250	1.590	-1.350	3408.189	1.620	-1.350
40.	6374.913	-0.010	0.760	3400.592	1.590	-1.310	3406.504	1.630	-1.310
41.	6374.901	-0.010	0.740	3400.910	1.560	-1.260	3404.818	1.620	-1.270
42.	6374.887	-0.010	0.710	3406.276	1.560	-1.220	3403.147	1.600	-1.230
43.	6374.874	-0.010	0.680	3407.910	1.530	-1.170	3401.507	1.560	-1.160
44.	6374.860	-0.010	0.650	3409.503	1.480	-1.120	3399.909	1.520	-1.130
45.	6374.846	-0.010	0.620	3401.041	1.430	-1.060	3398.365	1.460	-1.060
46.	6374.832	-0.010	0.590	3402.517	1.360	-1.010	3396.863	1.400	-1.020
47.	6374.818	-0.010	0.550	3403.922	1.290	-950	3395.472	1.330	-960
48.	6374.804	-0.010	0.520	3405.249	1.210	-8.80	3394.140	1.250	-9.00
49.	6374.791	-0.010	0.480	3406.491	1.130	-8.20	3392.092	1.160	-8.30

BULK

111-PLANE EUROPIUM IRON GARNET

BULK

	LNGVEL	LPH112	LPH113	FSRVEL	FSPH112	FSPH113	SSRVEL	SSPH112	SSPH113
50.	6376.779	-0.010	.440	3477.643	1.040	-.750	3391.735	-1.070	-.760
51.	6376.767	-0.010	.400	3478.700	.950	-.680	3390.674	-.980	-.690
52.	6376.756	-0.010	.360	3479.657	.850	-.610	3389.712	-.880	-.620
53.	6376.746	-0.000	.310	3480.510	.750	-.540	3388.655	-.790	-.550
54.	6376.737	-0.000	.270	3481.256	.650	-.460	3388.105	-.670	-.470
55.	6376.729	-0.000	.230	3481.892	.550	-.390	3387.466	-.570	-.400
56.	6376.723	-0.000	.180	3482.416	.440	-.310	3386.939	-.450	-.320
57.	6376.716	-0.000	.140	3482.825	.330	-.230	3386.528	-.340	-.240
58.	6376.714	-0.000	.090	3483.119	.220	-.160	3386.233	-.230	-.190
59.	6376.712	-0.000	.050	3483.295	.110	-.080	3385.996	-.110	-.090
60.	6376.711	0.000	0.000	3483.354	-0.000	0.000	3385.712	-0.000	-0.000
61.	6376.712	0.000	-.050	3483.295	-.110	.060	3386.055	.110	.080
62.	6376.714	0.000	-.090	3483.119	-.220	.160	3386.233	.230	.180
63.	6376.716	0.000	-.140	3482.825	-.330	.230	3386.528	.340	.240
64.	6376.723	0.000	-.180	3482.416	-.440	.310	3386.939	.450	.320
65.	6376.729	0.000	-.230	3481.892	-.550	.390	3387.466	.570	.400
66.	6376.737	0.000	-.270	3481.256	-.650	.460	3388.105	.670	.470
67.	6376.746	0.000	-.310	3480.510	-.750	.540	3388.655	.780	.520
68.	6376.756	0.010	-.360	3479.657	-.850	.610	3389.712	.880	.620
69.	6376.767	0.010	-.400	3478.700	-.950	.680	3390.674	.980	.690
70.	6376.779	0.010	-.440	3477.643	-1.040	.750	3391.735	1.070	.760
71.	6376.791	0.010	-.480	3476.491	-1.130	.820	3392.692	1.160	.830
72.	6376.804	0.010	-.520	3475.249	-1.210	.890	3394.140	1.250	.900
73.	6376.816	0.010	-.550	3473.922	-1.290	.950	3395.472	1.330	.960
74.	6376.832	0.010	-.590	3472.517	-1.360	1.010	3396.683	1.400	1.020
75.	6376.846	0.010	-.620	3471.041	-1.430	1.060	3397.365	1.460	1.090
76.	6376.860	0.010	-.660	3469.503	-1.480	1.120	3397.909	1.520	1.130
77.	6376.874	0.010	-.680	3467.910	-1.530	1.170	3401.507	1.560	1.180
78.	6376.887	0.010	-.710	3466.276	-1.560	1.220	3403.147	1.600	1.230
79.	6376.901	0.010	-.740	3464.610	-1.590	1.260	3404.816	1.620	1.270
80.	6376.913	0.010	-.760	3462.929	-1.600	1.310	3406.504	1.630	1.310
81.	6376.925	0.010	-.780	3461.244	-1.590	1.350	3408.189	1.620	1.340
82.	6376.936	0.010	-.800	3459.592	-1.550	1.380	3409.851	1.580	1.360
83.	6376.946	0.000	-.820	3457.981	-1.500	1.410	3411.467	1.520	1.410
84.	6376.955	0.000	-.840	3456.446	-1.410	1.440	3413.005	1.430	1.440
85.	6376.962	0.000	-.850	3455.024	-1.280	1.460	3414.429	1.300	1.460
86.	6376.969	0.000	-.860	3453.756	-1.110	1.480	3415.698	1.130	1.480
87.	6376.974	0.000	-.870	3452.696	-.900	1.500	3416.763	.910	1.490
88.	6376.976	0.000	-.870	3451.888	-.630	1.510	3417.573	.640	1.500
89.	6376.980	0.000	-.880	3451.360	-.330	1.510	3418.081	.330	1.510
90.	6376.980	-0.000	-.880	3451.207	0.000	1.520	3418.255	-0.000	1.510
91.	6376.980	-0.000	-.880	3451.280	.230	1.510	3418.081	-.330	1.510
92.	6376.978	-0.000	-.870	3451.888	.630	1.500	3417.573	-.640	1.500
93.	6376.974	-0.000	-.870	3452.696	.900	1.500	3416.763	-.910	1.490
94.	6376.969	-0.000	-.860	3453.756	1.110	1.460	3415.698	-1.130	1.460
95.	6376.962	-0.000	-.850	3455.024	1.280	1.460	3414.429	-1.300	1.460
96.	6376.955	-0.000	-.840	3456.446	1.410	1.440	3413.005	-1.430	1.440
97.	6376.946	-0.000	-.820	3457.981	1.500	1.410	3411.467	-1.520	1.410
98.	6376.936	-0.010	-.800	3459.592	1.550	1.360	3409.851	-1.560	1.360
99.	6376.925	-0.010	-.780	3461.249	1.590	1.350	3408.189	-1.620	1.350

111-PLANE EUROPIUM IRON GARNET

BULK

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	6374.913	-0.00	-0.760	3462.929	1.600	1.310	3406.504	-1.630	1.310
101.	6374.901	-0.00	-0.740	3464.610	1.590	1.260	3404.816	-1.620	1.270
102.	6374.887	-0.00	-0.710	3466.276	1.560	1.220	3403.147	-1.600	1.230
103.	6374.874	-0.00	-0.680	3467.910	1.530	1.170	3401.507	-1.560	1.160
104.	6374.860	-0.00	-0.650	3469.503	1.460	1.120	3399.909	-1.520	1.130
105.	6374.846	-0.00	-0.620	3471.041	1.430	1.060	3398.365	-1.460	1.080
106.	6374.832	-0.00	-0.590	3472.517	1.360	1.010	3396.863	-1.400	1.020
107.	6374.818	-0.00	-0.550	3473.922	1.290	0.950	3395.472	-1.330	0.960
108.	6374.804	-0.00	-0.520	3475.249	1.210	0.880	3394.140	-1.250	0.900
109.	6374.791	-0.00	-0.480	3476.491	1.130	0.820	3392.892	-1.160	0.830
110.	6374.779	-0.00	-0.440	3477.643	1.040	0.750	3391.735	-1.070	0.760
111.	6374.767	-0.00	-0.400	3478.700	0.950	0.680	3390.674	-0.960	0.690
112.	6374.756	-0.00	-0.360	3479.657	0.850	0.610	3389.712	-0.880	0.620
113.	6374.746	-0.00	-0.310	3480.510	0.750	0.540	3388.855	-0.780	0.550
114.	6374.737	-0.00	-0.270	3481.256	0.650	0.460	3388.105	-0.670	0.470
115.	6374.729	-0.00	-0.230	3481.892	0.550	0.380	3387.466	-0.570	0.400
116.	6374.723	-0.00	-0.180	3482.416	0.440	0.310	3386.939	-0.450	0.320
117.	6374.716	-0.00	-0.140	3482.825	0.330	0.230	3386.528	-0.340	0.240
118.	6374.714	-0.00	-0.090	3483.119	0.220	0.160	3386.233	-0.230	0.160
119.	6374.712	-0.00	-0.050	3483.295	0.110	0.060	3386.055	-0.110	0.060
120.	6374.711	-0.00	0.000	3483.354	0.000	0.000	3385.996	0.000	0.000
121.	6374.712	0.000	0.050	3483.295	-0.110	-0.060	3386.055	0.110	-0.060
122.	6374.714	0.000	0.090	3483.119	-0.220	-0.160	3386.233	0.230	-0.160
123.	6374.716	0.000	0.140	3482.825	-0.330	-0.230	3386.528	0.340	-0.240
124.	6374.723	0.000	0.180	3482.416	-0.440	-0.310	3386.939	0.450	-0.320
125.	6374.729	0.000	0.230	3481.892	-0.550	-0.380	3387.466	0.570	-0.400
126.	6374.737	0.000	0.270	3481.256	-0.650	-0.460	3388.105	0.670	-0.470
127.	6374.746	0.000	0.310	3480.510	-0.750	-0.540	3388.855	0.780	-0.550
128.	6374.756	0.000	0.360	3479.657	-0.850	-0.610	3389.712	0.880	-0.620
129.	6374.767	0.000	0.400	3478.700	-0.950	-0.680	3390.674	0.960	-0.690
130.	6374.779	0.000	0.440	3477.643	-1.040	-0.750	3391.735	1.070	-0.760
131.	6374.791	0.000	0.480	3476.491	-1.130	-0.820	3392.892	1.160	-0.830
132.	6374.804	0.000	0.520	3475.249	-1.210	-0.880	3394.140	1.250	-0.900
133.	6374.816	0.000	0.550	3473.922	-1.290	-0.950	3395.472	1.330	-0.960
134.	6374.832	0.000	0.590	3472.517	-1.360	-1.010	3396.863	1.400	-1.020
135.	6374.846	0.000	0.620	3471.041	-1.430	-1.060	3398.365	1.460	-1.080
136.	6374.860	0.000	0.650	3469.503	-1.480	-1.120	3399.909	1.520	-1.130
137.	6374.874	0.000	0.680	3467.910	-1.530	-1.170	3401.507	1.560	-1.160
138.	6374.887	0.000	0.710	3466.276	-1.560	-1.220	3403.147	1.600	-1.230
139.	6374.901	0.000	0.740	3464.610	-1.590	-1.260	3404.816	1.620	-1.270
140.	6374.913	0.000	0.760	3462.929	-1.600	-1.310	3406.504	1.630	-1.310
141.	6374.925	0.000	0.780	3461.250	-1.590	-1.350	3408.189	1.620	-1.350
142.	6374.936	0.000	0.800	3459.592	-1.550	-1.360	3409.851	1.560	-1.360
143.	6374.946	0.000	0.820	3457.981	-1.500	-1.410	3411.467	1.520	-1.410
144.	6374.955	0.000	0.840	3456.446	-1.410	-1.440	3413.005	1.430	-1.440
145.	6374.962	0.000	0.850	3455.025	-1.260	-1.460	3414.429	1.300	-1.460
146.	6374.969	0.000	0.860	3453.756	-1.110	-1.480	3415.694	1.130	-1.480
147.	6374.974	0.000	0.870	3452.656	-0.900	-1.500	3416.763	0.910	-1.490
148.	6374.977	0.000	0.870	3451.886	-0.630	-1.510	3417.573	0.640	-1.500
149.	6374.980	0.000	0.860	3451.380	-0.330	-1.510	3418.061	0.330	-1.510

111-PLANE EUROPIUM IRON GARNET

BULK

	LNGL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
150.	6374.900	0.000	.000	3451.207	-0.000	-1.520	3416.255	-0.000	-1.510
151.	6374.900	-0.000	.000	3451.300	.330	-1.510	3416.081	-.330	-1.510
152.	6374.978	-0.000	.070	3451.886	.630	-1.510	3417.573	-.043	-1.500
153.	6374.974	-0.000	.070	3452.696	.900	-1.500	3416.763	-.910	-1.490
154.	6374.969	-0.000	.060	3453.758	1.110	-1.460	3415.696	-1.130	-1.400
155.	6374.962	-0.000	.050	3455.025	1.280	-1.460	3414.429	-1.300	-1.400
156.	6374.955	-0.000	.040	3456.446	1.410	-1.440	3413.005	-1.430	-1.440
157.	6374.946	-0.000	.020	3457.981	1.500	-1.410	3411.467	-1.520	-1.410
158.	6374.936	-0.010	.000	3459.592	1.550	-1.360	3409.651	-1.580	-1.360
159.	6374.925	-0.010	.000	3461.250	1.590	-1.350	3408.189	-1.620	-1.350
160.	6374.913	-0.010	.070	3462.929	1.600	-1.310	3406.504	-1.630	-1.310
161.	6374.901	-0.010	.070	3464.610	1.590	-1.260	3404.818	-1.620	-1.270
162.	6374.887	-0.010	.070	3466.276	1.560	-1.220	3403.147	-1.600	-1.230
163.	6374.874	-0.010	.060	3467.910	1.530	-1.170	3401.507	-1.560	-1.100
164.	6374.860	-0.010	.050	3469.503	1.460	-1.120	3399.909	-1.520	-1.130
165.	6374.846	-0.010	.020	3471.041	1.430	-1.060	3398.365	-1.460	-1.060
166.	6374.832	-0.010	.050	3472.517	1.360	-1.010	3396.883	-1.400	-1.020
167.	6374.818	-0.010	.050	3473.922	1.290	-0.950	3395.472	-1.330	-0.960
168.	6374.804	-0.010	.020	3475.249	1.210	-0.860	3394.140	-1.250	-0.940
169.	6374.791	-0.010	.060	3476.491	1.130	-0.820	3392.892	-1.160	-0.930
170.	6374.779	-0.010	.040	3477.643	1.040	-0.750	3391.735	-1.070	-0.900
171.	6374.767	-0.010	.000	3478.780	.950	-0.660	3390.674	-.980	-0.830
172.	6374.756	-0.010	.060	3479.657	.850	-0.610	3389.712	-.900	-0.760
173.	6374.746	-0.000	.010	3480.510	.750	-0.540	3388.855	-.820	-0.690
174.	6374.737	-0.000	.020	3481.256	.650	-0.460	3388.105	-.760	-0.640
175.	6374.729	-0.000	.030	3481.892	.550	-0.390	3387.466	-.700	-0.570
176.	6374.723	-0.000	.010	3482.416	.440	-0.310	3386.939	-.650	-0.500
177.	6374.718	-0.000	.010	3482.825	.330	-0.230	3386.528	-.600	-0.440
178.	6374.714	-0.000	.090	3483.119	.220	-0.160	3386.233	-.550	-0.370
179.	6374.712	-0.000	.050	3483.295	.110	-0.080	3386.055	-.500	-0.300
180.	6374.711	0.000	-0.000	3483.354	-0.000	0.000	3385.996	0.000	0.000

110-PLANE EUROPIUM IRON GARNET

BULK

	LNGLVL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
0.	6392.173	0.000	0.000	3418.757	1.550	-0.000	3418.756	-1.550	-0.000
1.	6392.130	-0.040	-0.000	3420.375	1.560	0.000	3417.217	-1.410	-0.000
2.	6392.002	-0.090	0.000	3422.011	1.560	0.000	3415.820	-1.270	0.000
3.	6391.784	-0.140	0.000	3423.662	1.590	0.000	3414.573	-1.120	0.000
4.	6391.475	-0.160	0.000	3425.326	1.600	-0.000	3413.482	-0.970	0.000
5.	6391.074	-0.230	-0.000	3427.001	1.610	0.000	3412.552	-0.820	0.000
6.	6390.576	-0.280	-0.000	3428.685	1.620	0.000	3411.786	-0.650	-0.000
7.	6389.988	-0.330	-0.000	3430.375	1.620	0.000	3411.194	-0.490	-0.000
8.	6389.303	-0.380	-0.000	3432.071	1.620	-0.000	3410.772	-0.320	0.000
9.	6388.522	-0.430	0.000	3433.770	1.620	0.000	3410.525	-0.150	0.000
10.	6387.647	-0.470	0.000	3435.469	1.620	0.000	3410.454	0.000	0.000
11.	6386.677	-0.520	-0.000	3437.166	1.620	0.000	3410.559	0.150	-0.000
12.	6385.615	-0.570	-0.000	3438.861	1.610	-0.000	3410.641	0.360	-0.000
13.	6384.461	-0.620	-0.000	3440.545	1.610	0.000	3411.297	0.520	-0.000
14.	6383.219	-0.660	-0.000	3442.231	1.600	0.000	3411.525	0.690	-0.000
15.	6381.890	-0.710	-0.000	3443.902	1.590	-0.000	3412.724	0.850	0.000
16.	6380.478	-0.750	0.000	3445.562	1.560	0.000	3413.680	1.010	0.000
17.	6378.986	-0.790	0.000	3447.209	1.560	0.000	3414.814	1.160	-0.000
18.	6377.418	-0.830	0.000	3448.839	1.540	0.000	3416.097	1.310	-0.000
19.	6375.776	-0.860	-0.000	3450.453	1.530	0.000	3417.529	1.450	-0.000
20.	6374.070	-0.900	0.000	3452.046	1.510	0.000	3419.105	1.590	-0.000
21.	6372.300	-0.930	-0.000	3453.619	1.480	0.000	3420.816	1.700	-0.000
22.	6370.472	-0.960	-0.000	3455.168	1.460	0.000	3422.655	1.820	0.000
23.	6368.593	-0.980	-0.000	3456.591	1.430	0.000	3424.613	1.930	-0.000
24.	6366.668	-1.000	-0.000	3458.108	1.410	-0.000	3426.680	2.030	-0.000
25.	6364.704	-1.020	-0.000	3459.656	1.380	0.000	3428.847	2.120	-0.000
26.	6362.706	-1.040	0.000	3461.094	1.350	-0.000	3431.103	2.200	0.000
27.	6360.682	-1.050	-0.000	3462.499	1.320	0.000	3433.437	2.260	0.000
28.	6358.639	-1.060	-0.000	3463.871	1.280	0.000	3435.837	2.320	-0.000
29.	6356.564	-1.080	0.000	3465.207	1.250	0.000	3438.293	2.370	0.000
30.	6354.523	-1.080	0.000	3466.505	1.210	-0.000	3440.742	2.400	-0.000
31.	6352.465	-1.080	-0.000	3467.765	1.170	0.000	3443.321	2.420	-0.000
32.	6350.417	-1.050	-0.000	3468.985	1.130	-0.000	3445.870	2.430	-0.000
33.	6348.386	-1.040	0.000	3470.164	1.090	-0.000	3448.424	2.430	0.000
34.	6346.380	-1.030	-0.000	3471.299	1.050	0.000	3450.972	2.420	0.000
35.	6344.407	-1.010	0.000	3472.390	1.010	-0.000	3453.501	2.390	-0.000
36.	6342.475	-0.990	-0.000	3473.436	0.970	0.000	3455.999	2.350	-0.000
37.	6340.590	-0.960	-0.000	3474.434	0.920	-0.000	3458.452	2.300	0.000
38.	6338.761	-0.930	0.000	3475.385	0.870	0.000	3460.850	2.240	-0.000
39.	6336.994	-0.900	0.000	3476.286	0.830	0.000	3463.180	2.170	0.000
40.	6335.296	-0.860	0.000	3477.138	0.780	0.000	3465.430	2.090	-0.000
41.	6333.675	-0.820	0.000	3477.938	0.730	-0.000	3467.589	2.000	-0.000
42.	6332.138	-0.770	0.000	3478.686	0.680	0.000	3469.647	1.890	-0.000
43.	6330.689	-0.730	0.000	3479.380	0.630	0.000	3471.593	1.760	-0.000
44.	6329.336	-0.680	0.000	3480.022	0.580	-0.000	3473.417	1.660	0.000
45.	6328.084	-0.620	-0.000	3480.608	0.530	0.000	3475.111	1.530	-0.000
46.	6326.936	-0.570	0.000	3481.139	0.470	0.000	3476.685	1.400	-0.000
47.	6325.903	-0.510	0.000	3481.615	0.420	-0.000	3478.072	1.260	0.000
48.	6324.983	-0.450	0.000	3482.033	0.370	0.000	3479.325	1.110	0.000
49.	6324.183	-0.380	-0.000	3482.395	0.310	0.000	3480.417	0.950	-0.000

110-PLANE EUROPIUM IRON GARNET

BULK

	LNQVEL	LPMI12	LPMI13	FSRWEL	FSPMI12	FSPMI13	SSRWEL	SSPMI12	SSPMI13
50.	6323.506	-.320	0.000	3482.700	.260	-0.000	3481.343	.790	0.000
51.	6322.954	-.250	0.000	3482.947	.210	0.000	3482.096	.630	0.000
52.	6322.530	-.190	-0.000	3483.136	.150	0.000	3482.679	.460	-0.000
53.	6322.236	-.120	0.000	3483.266	.100	0.000	3483.062	.300	0.000
54.	6322.073	-.050	0.000	3483.339	.040	-0.000	3483.305	.040	-0.000
55.	6322.042	.020	0.000	3483.352	-.010	0.000	3483.340	-.010	-0.000
56.	6322.142	.050	0.000	3483.306	-.070	0.000	3483.210	-.220	-0.000
57.	6322.375	.150	0.000	3483.205	-.120	0.000	3482.891	-.360	-0.000
58.	6322.738	.220	0.000	3483.043	-.160	0.000	3482.394	-.550	-0.000
59.	6323.229	.290	0.000	3482.824	-.230	0.000	3481.721	-.720	-0.000
60.	6323.848	.350	0.000	3482.546	-.290	0.000	3480.875	-.880	-0.000
61.	6324.590	.420	0.000	3482.211	-.340	0.000	3479.860	-1.030	-0.000
62.	6325.454	.460	0.000	3481.819	-.400	0.000	3478.683	-1.130	-0.000
63.	6326.435	.540	0.000	3481.371	-.450	0.000	3477.346	-1.330	-0.000
64.	6327.529	.600	0.000	3480.866	-.500	-0.000	3475.862	-1.470	-0.000
65.	6328.732	.650	0.000	3480.305	-.550	0.000	3474.233	-1.600	-0.000
66.	6330.036	.700	0.000	3479.690	-.610	0.000	3472.470	-1.730	-0.000
67.	6331.442	.750	0.000	3479.020	-.660	0.000	3470.580	-1.840	-0.000
68.	6332.939	.800	0.000	3478.297	-.710	0.000	3468.574	-1.950	0.000
69.	6334.521	.840	0.000	3477.522	-.760	-0.000	3466.461	-2.050	-0.000
70.	6336.183	.880	-0.000	3476.694	-.810	0.000	3464.252	-2.130	-0.000
71.	6337.916	.920	0.000	3475.817	-.850	0.000	3461.959	-2.210	-0.000
72.	6339.719	.950	0.000	3474.889	-.900	-0.000	3459.592	-2.280	-0.000
73.	6341.575	.980	0.000	3473.913	-.940	0.000	3457.163	-2.330	-0.000
74.	6343.490	1.000	0.000	3472.889	-.990	0.000	3454.685	-2.370	-0.000
75.	6345.444	1.020	0.000	3471.820	-1.030	-0.000	3452.169	-2.400	-0.000
76.	6347.436	1.040	0.000	3470.705	-1.080	-0.000	3449.629	-2.420	-0.000
77.	6349.455	1.050	0.000	3469.547	-1.120	0.000	3447.076	-2.430	-0.000
78.	6351.496	1.060	0.000	3468.346	-1.160	0.000	3444.523	-2.430	-0.000
79.	6353.551	1.060	0.000	3467.105	-1.190	0.000	3441.983	-2.410	-0.000
80.	6355.611	1.060	-0.000	3465.824	-1.230	0.000	3439.468	-2.380	-0.000
81.	6357.670	1.060	0.000	3464.506	-1.270	-0.000	3436.990	-2.340	-0.000
82.	6359.720	1.050	0.000	3463.151	-1.300	0.000	3434.562	-2.290	-0.000
83.	6361.754	1.040	0.000	3461.761	-1.330	-0.000	3432.195	-2.230	0.000
84.	6363.765	1.030	0.000	3460.339	-1.360	0.000	3429.901	-2.160	-0.000
85.	6365.746	1.010	-0.000	3458.885	-1.390	0.000	3427.691	-2.070	-0.000
86.	6367.690	.990	0.000	3457.401	-1.420	0.000	3425.576	-1.990	-0.000
87.	6369.591	.970	0.000	3455.890	-1.450	0.000	3423.565	-1.970	-0.000
88.	6371.444	.940	0.000	3454.353	-1.470	0.000	3421.669	-1.940	-0.000
89.	6373.242	.910	0.000	3452.791	-1.500	0.000	3419.896	-1.910	0.000
90.	6374.980	.860	-0.000	3451.207	-1.520	0.000	3418.255	-1.870	0.000
91.	6376.652	.840	0.000	3449.603	-1.540	0.000	3416.754	-1.830	-0.000
92.	6378.255	.810	-0.000	3447.980	-1.560	0.000	3415.301	-1.800	-0.000
93.	6379.784	.770	-0.000	3446.341	-1.570	0.000	3414.280	-1.820	-0.000
94.	6381.234	.730	0.000	3444.687	-1.590	0.000	3413.159	-1.920	-0.000
95.	6382.602	.680	0.000	3443.021	-1.590	0.000	3412.281	-1.760	0.000
96.	6383.886	.640	0.000	3441.344	-1.600	0.000	3411.572	-.680	-0.000
97.	6385.081	.590	0.000	3439.659	-1.610	0.000	3411.034	-.430	-0.000
98.	6386.187	.540	0.000	3437.967	-1.620	0.000	3410.670	-.270	-0.000
99.	6387.201	.500	0.000	3436.270	-1.620	0.000	3410.482	-.100	-0.000

110-PLANE EUROPIUM IRON GARNET

BULK

	LMGVEL	LPMI12	LPMI13	FSRVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13
100.	6388.121	.450	0.000	3434.572	-1.620	0.000	3410.470	.070	0.000
101.	6388.946	.400	0.000	3432.873	-1.620	0.000	3410.634	.240	0.000
102.	6389.677	.350	0.000	3431.175	-1.620	0.000	3410.973	.410	0.000
103.	6390.312	.300	0.000	3429.482	-1.620	0.000	3411.486	.560	0.000
104.	6390.852	.250	0.000	3427.794	-1.610	0.000	3412.170	.740	0.000
105.	6391.297	.200	0.000	3426.115	-1.600	0.000	3413.022	.900	0.000
106.	6391.650	.160	0.000	3424.446	-1.590	0.000	3414.036	1.050	0.000
107.	6391.910	.110	0.000	3422.788	-1.580	0.000	3415.212	1.200	0.000
108.	6392.081	.060	0.000	3421.145	-1.570	0.000	3416.539	1.350	0.000
109.	6392.163	.020	0.000	3419.516	-1.550	0.000	3418.013	1.460	0.000
110.	6392.161	-.020	0.000	3417.909	-1.540	0.000	3419.626	1.610	0.000
111.	6392.077	-.060	0.000	3416.320	-1.520	0.000	3421.371	1.730	0.000
112.	6391.914	-.100	0.000	3414.754	-1.490	0.000	3423.239	1.850	0.000
113.	6391.676	-.140	0.000	3413.211	-1.470	0.000	3425.221	1.950	0.000
114.	6391.367	-.180	0.000	3411.695	-1.450	0.000	3427.307	2.040	0.000
115.	6390.992	-.210	0.000	3410.206	-1.420	0.000	3429.489	2.130	0.000
116.	6390.554	-.240	0.000	3408.747	-1.390	0.000	3431.754	2.200	0.000
117.	6390.059	-.270	0.000	3407.319	-1.360	0.000	3434.093	2.270	0.000
118.	6389.511	-.290	0.000	3405.925	-1.330	0.000	3436.493	2.320	0.000
119.	6388.917	-.320	0.000	3404.566	-1.290	0.000	3438.944	2.360	0.000
120.	6388.281	-.340	0.000	3403.244	-1.260	0.000	3441.434	2.390	0.000
121.	6387.609	-.350	0.000	3401.960	-1.220	0.000	3443.950	2.410	0.000
122.	6386.906	-.370	0.000	3400.716	-1.180	0.000	3446.481	2.410	0.000
123.	6386.179	-.360	0.000	3399.513	-1.140	0.000	3449.014	2.410	0.000
124.	6385.433	-.390	0.000	3398.354	-1.100	0.000	3451.537	2.390	0.000
125.	6384.674	-.390	0.000	3397.235	-1.060	0.000	3454.038	2.360	0.000
126.	6383.907	-.350	0.000	3396.170	-1.010	0.000	3456.505	2.320	0.000
127.	6383.140	-.340	0.000	3395.146	-.960	0.000	3458.925	2.270	0.000
128.	6382.376	-.390	0.000	3394.175	-.920	0.000	3461.288	2.210	0.000
129.	6381.623	-.380	0.000	3393.252	-.870	0.000	3463.581	2.140	0.000
130.	6380.885	-.370	0.000	3392.380	-.820	0.000	3465.794	2.050	0.000
131.	6380.169	-.360	0.000	3391.559	-.770	0.000	3467.916	1.960	0.000
132.	6379.476	-.350	0.000	3390.792	-.720	0.000	3469.936	1.860	0.000
133.	6378.810	-.330	0.000	3390.079	-.660	0.000	3471.845	1.750	0.000
134.	6378.154	-.310	0.000	3389.421	-.610	0.000	3473.633	1.630	0.000
135.	6377.511	-.290	0.000	3388.819	-.560	0.000	3475.293	1.500	0.000
136.	6376.871	-.270	0.000	3388.273	-.500	0.000	3476.814	1.370	0.000
137.	6376.260	-.240	0.000	3387.785	-.450	0.000	3478.191	1.230	0.000
138.	6375.640	-.210	0.000	3387.354	-.390	0.000	3479.416	1.080	0.000
139.	6375.027	-.180	0.000	3386.982	-.330	0.000	3480.484	.930	0.000
140.	6374.427	-.150	0.000	3386.664	-.270	0.000	3481.389	.780	0.000
141.	6373.859	-.120	0.000	3386.415	-.220	0.000	3482.127	.620	0.000
142.	6373.322	-.090	0.000	3386.221	-.160	0.000	3482.695	.450	0.000
143.	6372.806	-.060	0.000	3386.087	-.100	0.000	3483.086	.290	0.000
144.	6372.329	-.020	0.000	3385.998	-.040	0.000	3483.307	.120	0.000
145.	6371.713	.010	0.000	3385.998	.020	0.000	3483.346	-.040	0.000
146.	6371.073	.040	0.000	3386.044	.070	0.000	3483.213	-.210	0.000
147.	6370.476	.070	0.000	3386.150	.130	0.000	3482.902	-.360	0.000
148.	6370.054	.110	0.000	3386.316	.190	0.000	3482.417	-.540	0.000
149.	6370.293	.140	0.000	3386.542	.250	0.000	3481.759	-.700	0.000

110-PLANE EUROPIUM IRON GARNET

BULK

	LNGLVL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
150.	6375.593	.170	0.000	3366.827	.316	0.000	3480.932	-0.860	0.000
151.	6375.951	.200	0.000	3387.171	.360	0.000	3479.940	-1.014	0.000
152.	6376.366	.230	0.000	3387.574	.420	0.000	3476.789	-1.160	0.000
153.	6376.833	.250	0.000	3388.836	.470	-0.000	3477.483	-1.300	0.000
154.	6377.350	.260	0.000	3388.554	.530	0.000	3476.026	-1.440	0.000
155.	6377.914	.300	0.000	3389.130	.580	0.000	3474.433	-1.570	0.000
156.	6378.519	.320	0.000	3389.762	.640	0.000	3472.705	-1.690	0.000
157.	6379.162	.340	0.000	3390.449	.690	0.000	3470.852	-1.810	0.000
158.	6379.839	.360	0.000	3391.191	.740	0.000	3468.843	-1.910	0.000
159.	6380.544	.370	0.000	3391.946	.800	0.000	3466.808	-2.010	0.000
160.	6381.273	.380	0.000	3392.834	.850	0.000	3464.636	-2.100	0.000
161.	6382.019	.390	0.000	3393.733	.890	0.000	3462.380	-2.180	0.000
162.	6382.779	.390	0.000	3394.683	.940	0.000	3460.048	-2.240	0.000
163.	6383.545	.390	0.000	3395.682	.990	0.000	3457.654	-2.300	0.000
164.	6384.313	.390	0.000	3396.729	1.030	0.000	3455.207	-2.340	0.000
165.	6385.076	.390	0.000	3397.822	1.060	0.000	3452.721	-2.380	0.000
166.	6385.829	.380	0.000	3398.960	1.120	0.000	3450.207	-2.400	0.000
167.	6386.566	.370	0.000	3400.143	1.160	0.000	3447.677	-2.410	0.000
168.	6387.281	.360	0.000	3401.367	1.200	0.000	3445.144	-2.410	0.000
169.	6387.968	.350	0.000	3402.633	1.240	0.000	3442.619	-2.400	0.000
170.	6388.622	.330	0.000	3403.937	1.280	0.000	3440.115	-2.370	0.000
171.	6389.236	.300	0.000	3405.279	1.310	0.000	3437.645	-2.340	0.000
172.	6389.807	.280	-0.000	3406.657	1.340	0.000	3435.219	-2.290	0.000
173.	6390.327	.250	-0.000	3408.069	1.380	0.000	3432.849	-2.230	0.000
174.	6390.792	.220	-0.000	3409.513	1.410	-0.000	3430.548	-2.170	0.000
175.	6391.196	.190	0.000	3410.988	1.430	-0.000	3428.326	-2.090	0.000
176.	6391.539	.160	-0.000	3412.492	1.460	-0.000	3426.193	-2.000	0.000
177.	6391.811	.120	-0.000	3414.023	1.480	-0.000	3424.160	-1.900	0.000
178.	6392.010	.080	-0.000	3415.578	1.510	-0.000	3422.237	-1.790	0.000
179.	6392.131	.040	-0.000	3417.157	1.530	-0.000	3420.434	-1.670	0.000
180.	6392.173	0.000	-0.000	3418.756	1.550	0.000	3418.757	-1.550	0.000

Z-PLANE (XY-PLANE) GADOLINIUM GALLIUM GARNET

	LNCVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
0.	6347.249	0.000	0.000	3567.782	0.000	0.000	3567.782	0.000	0.000
1.	6347.317	-0.070	0.000	3567.782	0.000	0.000	3567.661	-0.220	0.000
2.	6347.520	-1.140	0.000	3567.782	-0.000	0.000	3567.299	-0.440	0.000
3.	6347.858	-2.210	0.000	3567.782	0.000	0.000	3566.698	-0.660	0.000
4.	6348.328	-3.280	0.000	3567.782	0.000	0.000	3565.860	-0.880	0.000
5.	6348.929	-4.340	0.000	3567.782	-0.000	0.000	3564.791	-1.090	0.000
6.	6349.657	-5.410	0.000	3567.782	0.000	0.000	3563.495	-1.300	0.000
7.	6350.507	-6.470	0.000	3567.782	0.000	0.000	3561.978	-1.500	0.000
8.	6351.477	-7.530	0.000	3567.782	0.000	0.000	3560.250	-1.690	0.000
9.	6352.560	-8.590	0.000	3567.782	0.000	0.000	3558.317	-1.870	0.000
10.	6353.750	-9.640	0.000	3567.782	0.000	0.000	3556.190	-2.050	0.000
11.	6355.043	-10.690	0.000	3567.782	0.000	0.000	3553.880	-2.210	0.000
12.	6356.430	-11.740	0.000	3567.782	-0.000	0.000	3551.398	-2.370	0.000
13.	6357.906	-12.780	0.000	3567.782	0.000	0.000	3548.750	-2.510	0.000
14.	6359.461	-13.820	0.000	3567.782	0.000	0.000	3545.968	-2.640	0.000
15.	6361.089	-14.860	0.000	3567.782	0.000	0.000	3543.047	-2.760	0.000
16.	6362.781	-15.890	0.000	3567.782	0.000	0.000	3540.008	-2.870	0.000
17.	6364.528	-16.910	0.000	3567.782	0.000	0.000	3536.865	-2.960	0.000
18.	6366.322	-17.940	0.000	3567.782	0.000	0.000	3533.635	-3.030	0.000
19.	6368.153	-18.950	0.000	3567.782	0.000	0.000	3530.334	-3.100	0.000
20.	6370.013	-19.960	0.000	3567.782	0.000	0.000	3526.977	-3.140	0.000
21.	6371.893	-20.970	0.000	3567.782	0.000	0.000	3523.580	-3.170	0.000
22.	6373.782	-21.970	0.000	3567.782	0.000	0.000	3520.162	-3.190	0.000
23.	6375.672	-22.970	0.000	3567.782	0.000	0.000	3516.737	-3.190	0.000
24.	6377.554	-23.950	0.000	3567.782	0.000	0.000	3513.323	-3.180	0.000
25.	6379.418	-24.950	0.000	3567.782	0.000	0.000	3509.937	-3.150	0.000
26.	6381.256	-25.940	0.000	3567.782	0.000	0.000	3506.594	-3.100	0.000
27.	6383.059	-26.920	0.000	3567.782	-0.000	0.000	3503.312	-3.040	0.000
28.	6384.816	-27.890	0.000	3567.782	-0.000	0.000	3500.105	-2.960	0.000
29.	6386.525	-28.860	0.000	3567.782	0.000	0.000	3496.989	-2.870	0.000
30.	6388.172	-29.830	0.000	3567.782	-0.000	0.000	3493.980	-2.770	0.000
31.	6389.751	-30.790	0.000	3567.782	0.000	0.000	3491.091	-2.650	0.000
32.	6391.255	-31.750	0.000	3567.782	0.000	0.000	3488.337	-2.520	0.000
33.	6392.677	-32.710	0.000	3567.782	-0.000	0.000	3485.731	-2.380	0.000
34.	6394.010	-33.660	0.000	3567.782	0.000	0.000	3483.284	-2.230	0.000
35.	6395.249	-34.610	0.000	3567.782	0.000	0.000	3481.010	-2.060	0.000
36.	6396.387	-35.560	0.000	3567.782	0.000	0.000	3478.916	-1.880	0.000
37.	6397.419	-36.500	0.000	3567.782	0.000	0.000	3477.019	-1.700	0.000
38.	6398.342	-37.440	0.000	3567.782	0.000	0.000	3475.321	-1.510	0.000
39.	6399.150	-38.380	0.000	3567.782	0.000	0.000	3473.833	-1.300	0.000
40.	6399.840	-39.320	0.000	3567.782	-0.000	0.000	3472.562	-1.100	0.000
41.	6400.408	-40.260	0.000	3567.782	0.000	0.000	3471.514	-0.880	0.000
42.	6400.853	-41.190	0.000	3567.782	0.000	0.000	3470.693	-0.670	0.000
43.	6401.173	-42.130	0.000	3567.782	0.000	0.000	3470.104	-0.450	0.000
44.	6401.365	-43.070	0.000	3567.782	-0.000	0.000	3469.750	-0.220	0.000
45.	6401.429	-44.000	0.000	3567.782	0.000	0.000	3469.631	0.000	0.000
46.	6401.365	-44.940	0.000	3567.782	0.000	0.000	3469.750	-0.220	0.000
47.	6401.173	-45.880	0.000	3567.782	0.000	0.000	3470.104	-0.450	0.000
48.	6400.853	-46.820	0.000	3567.782	0.000	0.000	3470.693	-0.670	0.000
49.	6400.408	-47.760	0.000	3567.782	0.000	0.000	3471.514	-0.880	0.000

BULK

Z-PLANE (XY-PLANE) GADOLINIUM GALLIUM GARNET

	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
50.	6399.840	0.000	3567.762	0.000	0.000	3472.562	1.100	0.000
51.	6399.150	0.000	3567.762	-0.000	0.000	3473.833	1.300	0.000
52.	6398.342	0.000	3567.762	0.000	0.000	3473.321	1.510	0.000
53.	6397.419	0.000	3567.762	0.000	0.000	3477.919	1.700	0.000
54.	6396.387	0.000	3567.762	0.000	0.000	3478.918	1.880	0.000
55.	6395.249	0.000	3567.762	0.000	0.000	3481.010	2.060	0.000
56.	6394.010	0.000	3567.762	-0.000	0.000	3483.284	2.230	0.000
57.	6392.677	0.000	3567.762	0.000	0.000	3485.731	2.360	0.000
58.	6391.255	0.000	3567.762	0.000	0.000	3484.337	2.520	0.000
59.	6389.751	0.000	3567.762	0.000	0.000	3481.091	2.650	0.000
60.	6388.172	0.000	3567.762	0.000	0.000	3493.980	2.770	0.000
61.	6386.525	0.000	3567.762	0.000	0.000	3496.989	2.870	0.000
62.	6384.816	0.000	3567.762	0.000	0.000	3503.105	2.960	0.000
63.	6383.059	0.000	3567.762	0.000	0.000	3503.312	3.040	0.000
64.	6381.256	0.000	3567.762	0.000	0.000	3506.594	3.100	0.000
65.	6379.410	0.000	3567.762	-0.000	0.000	3509.537	3.150	0.000
66.	6377.554	0.000	3567.762	0.000	0.000	3513.323	3.180	0.000
67.	6375.672	0.000	3567.762	-0.000	0.000	3516.737	3.190	0.000
68.	6373.782	0.000	3567.762	0.000	0.000	3520.162	3.190	0.000
69.	6371.893	0.000	3567.762	0.000	0.000	3523.580	3.170	0.000
70.	6370.013	0.000	3567.762	0.000	0.000	3526.977	3.140	0.000
71.	6368.153	0.000	3567.762	0.000	0.000	3530.334	3.100	0.000
72.	6366.322	0.000	3567.762	-0.000	0.000	3533.635	3.030	0.000
73.	6364.526	0.000	3567.762	0.000	0.000	3536.865	2.960	0.000
74.	6362.781	0.000	3567.762	0.000	0.000	3540.008	2.870	0.000
75.	6361.089	0.000	3567.762	0.000	0.000	3543.047	2.760	0.000
76.	6359.461	0.000	3567.762	0.000	0.000	3545.968	2.640	0.000
77.	6357.906	0.000	3567.762	0.000	0.000	3548.756	2.510	0.000
78.	6356.430	0.000	3567.762	0.000	0.000	3551.398	2.370	0.000
79.	6355.043	0.000	3567.762	0.000	0.000	3553.880	2.210	0.000
80.	6353.750	0.000	3567.762	0.000	0.000	3556.190	2.050	0.000
81.	6352.560	0.000	3567.762	0.000	0.000	3558.317	1.870	0.000
82.	6351.477	0.000	3567.762	0.000	0.000	3560.250	1.690	0.000
83.	6350.507	0.000	3567.762	0.000	0.000	3561.976	1.500	0.000
84.	6349.657	0.000	3567.762	0.000	0.000	3563.495	1.300	0.000
85.	6348.929	0.000	3567.762	0.000	0.000	3564.791	1.090	0.000
86.	6348.328	0.000	3567.762	0.000	0.000	3565.860	.880	0.000
87.	6347.858	0.000	3567.762	0.000	0.000	3566.698	.660	0.000
88.	6347.520	0.000	3567.762	0.000	0.000	3567.299	.440	0.000
89.	6347.317	0.000	3567.762	-0.000	0.000	3567.661	.220	0.000
90.	6347.249	0.000	3567.762	-0.000	0.000	3567.762	0.000	0.000
91.	6347.317	0.000	3567.762	0.000	0.000	3567.661	-.220	0.000
92.	6347.520	0.000	3567.762	0.000	0.000	3567.299	-.440	0.000
93.	6347.858	0.000	3567.762	0.000	0.000	3566.698	-.660	0.000
94.	6348.328	0.000	3567.762	0.000	0.000	3565.860	-.880	0.000
95.	6348.929	0.000	3567.762	-0.000	0.000	3564.791	-1.090	0.000
96.	6349.657	0.000	3567.762	0.000	0.000	3563.495	-1.300	0.000
97.	6350.507	0.000	3567.762	-0.000	0.000	3561.976	-1.500	0.000
98.	6351.477	0.000	3567.762	0.000	0.000	3560.250	-1.690	0.000
99.	6352.560	0.000	3567.762	0.000	0.000	3558.317	-1.870	0.000

BULK

Z-PLANE (XY-PLANE) GAOLINIUM GALLIUM GARNET

	LMVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	6353.750	.640	0.000	3567.782	0.000	0.000	3556.190	-2.650	0.000
101.	6355.043	.690	0.000	3567.782	-0.000	0.000	3553.080	-2.210	0.000
102.	6356.430	.740	0.000	3567.782	0.000	0.000	3551.334	-2.370	0.000
103.	6357.906	.780	0.000	3567.782	-0.000	0.000	3548.756	-2.510	0.000
104.	6359.461	.820	0.000	3567.782	0.000	0.000	3545.968	-2.640	0.000
105.	6361.889	.860	0.000	3567.782	0.000	0.000	3543.067	-2.760	0.000
106.	6362.781	.890	0.000	3567.782	0.000	0.000	3540.008	-2.870	0.000
107.	6364.526	.910	0.000	3567.782	0.000	0.000	3536.665	-2.960	0.000
108.	6366.322	.940	0.000	3567.782	0.000	0.000	3533.635	-3.030	0.000
109.	6368.153	.950	0.000	3567.782	0.000	0.000	3530.334	-3.100	0.000
110.	6370.813	.960	0.000	3567.782	0.000	0.000	3526.977	-3.140	0.000
111.	6371.893	.970	0.000	3567.782	0.000	0.000	3523.500	-3.170	0.000
112.	6373.782	.970	0.000	3567.782	0.000	0.000	3520.162	-3.190	0.000
113.	6375.672	.970	0.000	3567.782	0.000	0.000	3516.737	-3.190	0.000
114.	6377.554	.960	0.000	3567.782	0.000	0.000	3513.323	-3.180	0.000
115.	6379.418	.950	0.000	3567.782	0.000	0.000	3509.937	-3.150	0.000
116.	6381.256	.940	0.000	3567.782	0.000	0.000	3506.594	-3.100	0.000
117.	6383.059	.920	0.000	3567.782	0.000	0.000	3503.312	-3.040	0.000
118.	6384.818	.890	0.000	3567.782	0.000	0.000	3500.105	-2.980	0.000
119.	6386.525	.860	0.000	3567.782	0.000	0.000	3496.989	-2.870	0.000
120.	6388.172	.830	0.000	3567.782	-0.000	0.000	3493.980	-2.770	0.000
121.	6389.751	.790	0.000	3567.782	0.000	0.000	3491.031	-2.650	0.000
122.	6391.255	.750	0.000	3567.782	-0.000	0.000	3488.337	-2.520	0.000
123.	6392.677	.710	0.000	3567.782	0.000	0.000	3485.731	-2.380	0.000
124.	6394.010	.660	0.000	3567.782	0.000	0.000	3483.264	-2.230	0.000
125.	6395.249	.610	0.000	3567.782	-0.000	0.000	3481.010	-2.060	0.000
126.	6396.387	.560	0.000	3567.782	0.000	0.000	3478.918	-1.880	0.000
127.	6397.419	.508	0.000	3567.782	0.000	0.000	3477.019	-1.700	0.000
128.	6398.342	.440	0.000	3567.782	-0.000	0.000	3475.321	-1.510	0.000
129.	6399.150	.360	0.000	3567.782	0.000	0.000	3473.833	-1.300	0.000
130.	6399.840	.320	0.000	3567.782	0.000	0.000	3472.562	-1.100	0.000
131.	6400.408	.260	0.000	3567.782	0.000	0.000	3471.514	-.860	0.000
132.	6400.853	.200	0.000	3567.782	0.000	0.000	3470.693	-.670	0.000
133.	6401.173	.130	0.000	3567.782	0.000	0.000	3470.184	-.450	0.000
134.	6401.365	.070	0.000	3567.782	0.000	0.000	3469.750	-.220	0.000
135.	6401.429	-0.000	0.000	3567.782	0.000	0.000	3469.631	0.000	0.000
136.	6401.365	-.070	0.000	3567.782	0.000	0.000	3469.750	.450	0.000
137.	6401.173	-.130	0.000	3567.782	0.000	0.000	3470.184	.670	0.000
138.	6400.853	-.200	0.000	3567.782	0.000	0.000	3470.693	.860	0.000
139.	6400.406	-.260	0.000	3567.782	0.000	0.000	3471.514	1.100	0.000
140.	6399.840	-.320	0.000	3567.782	0.000	0.000	3472.562	1.300	0.000
141.	6399.150	-.360	0.000	3567.782	0.000	0.000	3473.833	1.510	0.000
142.	6398.342	-.440	0.000	3567.782	0.000	0.000	3475.321	1.700	0.000
143.	6397.419	-.508	0.000	3567.782	0.000	0.000	3477.019	1.880	0.000
144.	6396.387	-.560	0.000	3567.782	0.000	0.000	3478.918	2.060	0.000
145.	6395.249	-.610	0.000	3567.782	0.000	0.000	3481.010	2.230	0.000
146.	6394.010	-.660	0.000	3567.782	-0.000	0.000	3483.264	2.380	0.000
147.	6392.677	-.710	0.000	3567.782	0.000	0.000	3485.731	2.520	0.000
148.	6391.255	-.750	0.000	3567.782	0.000	0.000	3488.337	2.650	0.000
149.	6389.751	-.790	0.000	3567.782	-0.000	0.000	3491.031		

Z-PLANE (XY-PLANE) GADOLINIUM GALLIUM GARNET

BULK

	LNGLVL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
150.	6306.172	-830	0.000	3567.782	0.000	0.000	3593.980	2.770	0.000
151.	6306.525	-860	0.000	3567.782	0.000	0.000	3496.989	2.670	0.000
152.	6306.818	-890	0.000	3567.782	0.000	0.000	3500.105	2.960	0.000
153.	6303.059	-920	0.000	3567.782	0.000	0.000	3503.312	3.040	0.000
154.	6301.256	-940	0.000	3567.782	0.000	0.000	3506.594	3.100	0.000
155.	6379.416	-950	0.000	3567.782	0.000	0.000	3509.937	3.150	0.000
156.	6377.554	-960	0.000	3567.782	0.000	0.000	3513.323	3.160	0.000
157.	6375.672	-970	0.000	3567.782	0.000	0.000	3516.737	3.190	0.000
158.	6373.782	-970	0.000	3567.782	0.000	0.000	3520.162	3.190	0.000
159.	6371.893	-970	0.000	3567.782	-0.000	0.000	3523.580	3.170	0.000
160.	6370.013	-960	0.000	3567.782	-0.000	0.000	3526.977	3.140	0.000
161.	6368.153	-950	0.000	3567.782	0.000	0.000	3530.334	3.100	0.000
162.	6366.322	-940	0.000	3567.782	0.000	0.000	3533.635	3.030	0.000
163.	6364.526	-910	0.000	3567.782	0.000	0.000	3536.865	2.960	0.000
164.	6362.761	-890	0.000	3567.782	-0.000	0.000	3540.008	2.670	0.000
165.	6361.009	-860	0.000	3567.782	0.000	0.000	3543.047	2.760	0.000
166.	6359.461	-820	0.000	3567.782	0.000	0.000	3545.968	2.640	0.000
167.	6357.906	-760	0.000	3567.782	0.000	0.000	3548.756	2.510	0.000
168.	6356.430	-740	0.000	3567.782	0.000	0.000	3551.398	2.370	0.000
169.	6355.043	-690	0.000	3567.782	0.000	0.000	3553.880	2.210	0.000
170.	6353.750	-640	0.000	3567.782	-0.000	0.000	3556.190	2.050	0.000
171.	6352.560	-590	0.000	3567.782	0.000	0.000	3558.317	1.870	0.000
172.	6351.477	-530	0.000	3567.782	0.000	0.000	3560.250	1.690	0.000
173.	6349.657	-470	0.000	3567.782	0.000	0.000	3561.976	1.500	0.000
174.	6348.929	-410	0.000	3567.782	0.000	0.000	3563.495	1.300	0.000
175.	6348.328	-340	0.000	3567.782	0.000	0.000	3564.791	1.090	0.000
176.	6347.858	-260	0.000	3567.782	0.000	0.000	3565.860	.860	0.000
177.	6347.520	-210	0.000	3567.782	0.000	0.000	3566.698	.660	0.000
178.	6347.317	-140	0.000	3567.782	0.000	0.000	3567.299	.440	0.000
179.	6347.117	-670	0.000	3567.782	0.000	0.000	3567.661	.220	0.000
180.	6347.249	0.000	0.000	3567.782	-0.000	0.000	3567.782	0.000	0.000

111-PLANE GADOLINIUM GALLIUM GARNET

BULK

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	6401.429	-0.000	0.000	3567.782	-0.000	0.000	3469.631	0.000	-0.000
1.	6401.430	0.000	0.000	3567.722	-0.110	-0.080	3469.691	0.110	-0.080
2.	6401.432	0.000	0.000	3567.544	-0.220	-0.150	3469.670	0.230	-0.160
3.	6401.436	0.000	0.000	3567.246	-0.330	-0.230	3470.167	0.340	-0.230
4.	6401.441	0.000	0.000	3566.835	-0.430	-0.310	3470.502	0.450	-0.310
5.	6401.448	0.000	0.000	3566.307	-0.540	-0.360	3471.112	0.560	-0.390
6.	6401.456	0.000	0.000	3565.865	-0.640	-0.460	3471.756	0.660	-0.460
7.	6401.466	0.010	0.010	3564.913	-0.740	-0.530	3472.511	0.770	-0.540
8.	6401.477	0.010	0.010	3564.052	-0.840	-0.600	3473.375	0.870	-0.610
9.	6401.486	0.010	0.010	3563.087	-0.940	-0.670	3474.343	0.960	-0.680
10.	6401.501	0.010	0.010	3562.021	-1.030	-0.740	3475.412	1.060	-0.750
11.	6401.514	0.010	0.010	3560.859	-1.110	-0.810	3476.576	1.140	-0.820
12.	6401.529	0.010	0.010	3559.606	-1.200	-0.870	3477.835	1.230	-0.880
13.	6401.543	0.010	0.010	3558.266	-1.270	-0.930	3479.177	1.300	-0.940
14.	6401.558	0.010	0.010	3556.851	-1.340	-0.990	3480.596	1.360	-1.000
15.	6401.573	0.010	0.010	3555.363	-1.400	-1.050	3482.091	1.440	-1.060
16.	6401.586	0.010	0.010	3553.811	-1.460	-1.100	3483.647	1.490	-1.110
17.	6401.603	0.010	0.010	3552.206	-1.510	-1.150	3485.256	1.540	-1.160
18.	6401.618	0.010	0.010	3550.558	-1.560	-1.200	3486.909	1.570	-1.210
19.	6401.632	0.010	0.010	3548.878	-1.600	-1.240	3488.592	1.590	-1.250
20.	6401.645	0.010	0.010	3547.184	-1.640	-1.290	3490.291	1.600	-1.290
21.	6401.656	0.010	0.010	3545.490	-1.680	-1.320	3491.986	1.590	-1.330
22.	6401.670	0.010	0.010	3543.819	-1.730	-1.360	3493.662	1.560	-1.360
23.	6401.680	0.010	0.010	3542.195	-1.770	-1.390	3495.289	1.500	-1.390
24.	6401.690	0.000	0.000	3540.546	-1.800	-1.420	3496.839	1.410	-1.410
25.	6401.698	0.000	0.000	3539.215	-1.820	-1.440	3498.274	1.260	-1.440
26.	6401.705	0.000	0.000	3537.939	-1.840	-1.460	3499.552	1.110	-1.470
27.	6401.710	0.000	0.000	3536.866	-1.860	-1.470	3500.624	0.950	-1.470
28.	6401.714	0.000	0.000	3536.054	-1.880	-1.480	3501.440	0.830	-1.460
29.	6401.716	0.000	0.000	3535.542	-1.900	-1.490	3501.952	0.730	-1.460
30.	6401.717	0.000	0.000	3535.366	0.000	-1.490	3502.127	0.600	-1.470
31.	6401.716	0.000	0.000	3535.542	0.020	-1.490	3501.952	-0.330	-1.470
32.	6401.714	0.000	0.000	3536.054	0.040	-1.480	3501.440	-0.630	-1.480
33.	6401.710	0.000	0.000	3536.866	0.060	-1.470	3500.624	-0.940	-1.470
34.	6401.705	0.000	0.000	3537.939	0.080	-1.460	3499.552	-1.110	-1.450
35.	6401.696	0.000	0.000	3539.215	0.100	-1.440	3498.274	-1.260	-1.440
36.	6401.690	0.000	0.000	3540.546	0.120	-1.420	3496.839	-1.410	-1.410
37.	6401.680	0.000	0.000	3542.195	0.140	-1.390	3495.289	-1.500	-1.390
38.	6401.670	0.000	0.000	3543.819	0.160	-1.360	3493.662	-1.560	-1.360
39.	6401.658	0.000	0.000	3545.490	0.180	-1.320	3491.986	-1.590	-1.330
40.	6401.645	0.000	0.000	3547.184	0.200	-1.290	3490.291	-1.600	-1.290
41.	6401.632	0.000	0.000	3548.878	0.220	-1.240	3488.592	-1.590	-1.260
42.	6401.618	0.000	0.000	3550.558	0.240	-1.200	3486.909	-1.570	-1.210
43.	6401.603	0.000	0.000	3552.206	0.260	-1.150	3485.256	-1.540	-1.160
44.	6401.586	0.000	0.000	3553.811	0.280	-1.100	3483.647	-1.490	-1.110
45.	6401.573	0.000	0.000	3555.363	0.300	-1.050	3482.091	-1.440	-1.060
46.	6401.558	0.000	0.000	3556.851	0.320	-0.990	3480.596	-1.360	-1.000
47.	6401.543	0.000	0.000	3558.266	0.340	-0.930	3479.177	-1.300	-0.940
48.	6401.529	0.000	0.000	3559.606	0.360	-0.870	3477.835	-1.230	-0.880
49.	6401.514	0.000	0.000	3560.859	0.380	-0.810	3476.576	-1.140	-0.820

111-PLANE GADOLINIUM GALLIUM GARNET

	LPM12	LPM13	FSPM12	FSPM13	SSRM12	SSRM13	BULK	SSPM12	SSPM13
50.	6401.501	-.010	3562.021	1.030	3475.412	-.740	3475.412	-1.060	-7.50
51.	6401.480	-.010	3563.087	.940	3474.343	-.960	3474.343	-.960	-.600
52.	6401.477	-.010	3564.052	.840	3473.375	-.670	3473.375	-.670	-.610
53.	6401.466	-.010	3564.913	.740	3472.511	-.530	3472.511	-.770	-.340
54.	6401.456	-.000	3565.665	.640	3471.756	-.460	3471.756	-.660	-.460
55.	6401.448	-.000	3566.307	.540	3471.112	-.360	3471.112	-.560	-.350
56.	6401.441	-.000	3566.835	.430	3470.562	-.230	3470.562	-.450	-.310
57.	6401.436	-.000	3567.248	.330	3470.167	-.150	3470.167	-.340	-.230
58.	6401.432	-.000	3567.544	.220	3469.870	-.080	3469.870	-.230	-.160
59.	6401.430	0.000	3567.722	.110	3469.691	0.000	3469.691	-.110	-.060
60.	6401.429	0.000	3567.782	-.000	3469.631	.080	3469.631	-.110	-.060
61.	6401.430	-.050	3567.722	-.110	3469.670	.150	3469.670	.230	.160
62.	6401.432	-.090	3567.544	-.220	3470.167	.230	3470.167	.340	.230
63.	6401.436	-.140	3567.248	-.330	3470.562	.310	3470.562	.450	.310
64.	6401.441	-.190	3566.835	-.430	3471.112	.360	3471.112	.560	.350
65.	6401.446	-.230	3566.307	-.540	3471.756	.460	3471.756	.660	.460
66.	6401.456	-.280	3565.665	-.640	3472.511	.530	3472.511	.770	.540
67.	6401.466	-.320	3564.913	-.740	3473.375	.600	3473.375	.870	.610
68.	6401.477	-.370	3564.052	-.840	3474.343	.670	3474.343	.960	.680
69.	6401.486	-.410	3563.087	-.940	3475.412	.740	3475.412	1.060	.750
70.	6401.501	-.450	3562.021	-1.030	3476.578	.810	3476.578	1.140	.820
71.	6401.514	-.500	3560.855	-1.110	3477.835	.870	3477.835	1.230	.860
72.	6401.529	-.530	3559.606	-1.200	3479.177	.930	3479.177	1.300	.940
73.	6401.543	-.570	3558.260	-1.270	3480.596	.990	3480.596	1.360	1.000
74.	6401.554	-.600	3556.851	-1.340	3482.091	1.050	3482.091	1.440	1.060
75.	6401.573	-.640	3555.363	-1.400	3483.647	1.100	3483.647	1.500	1.110
76.	6401.588	-.670	3553.811	-1.460	3485.256	1.150	3485.256	1.570	1.160
77.	6401.603	-.700	3552.206	-1.510	3486.909	1.200	3486.909	1.600	1.210
78.	6401.616	-.730	3550.557	-1.560	3488.592	1.240	3488.592	1.670	1.220
79.	6401.632	-.750	3548.878	-1.570	3490.291	1.290	3490.291	1.690	1.290
80.	6401.645	-.780	3547.184	-1.560	3491.980	1.320	3491.980	1.590	1.360
81.	6401.658	-.800	3545.490	-1.560	3493.662	1.360	3493.662	1.560	1.350
82.	6401.670	-.820	3543.819	-1.530	3495.284	1.390	3495.284	1.410	1.410
83.	6401.680	-.840	3542.195	-1.470	3496.839	1.420	3496.839	1.240	1.440
84.	6401.690	-.860	3540.648	-1.350	3498.274	1.440	3498.274	1.240	1.450
85.	6401.696	-.870	3539.215	-1.260	3499.552	1.460	3499.552	1.110	1.440
86.	6401.705	-.880	3537.935	-1.100	3501.440	1.470	3501.440	.630	1.440
87.	6401.714	-.890	3536.866	-.620	3501.952	1.460	3501.952	.330	1.460
88.	6401.716	-.890	3535.542	-.320	3502.127	1.490	3502.127	-0.000	1.460
89.	6401.716	-.900	3535.366	-.000	3501.952	1.490	3501.952	-.330	1.460
90.	6401.717	-.900	3535.542	.620	3501.440	1.460	3501.440	-.630	1.440
91.	6401.716	-.890	3536.054	.860	3500.824	1.460	3500.824	-.890	1.470
92.	6401.714	-.890	3536.866	.860	3499.552	1.470	3499.552	-1.110	1.450
93.	6401.710	-.880	3537.939	1.100	3498.274	1.460	3498.274	-1.260	1.440
94.	6401.705	-.870	3539.215	1.260	3496.839	1.440	3496.839	-1.410	1.410
95.	6401.698	-.860	3540.648	1.350	3495.289	1.360	3495.289	-1.500	1.390
96.	6401.690	-.850	3542.195	1.470	3493.662	1.360	3493.662	-1.560	1.360
97.	6401.680	-.840	3543.819	1.530	3491.980	1.320	3491.980	-1.590	1.330
98.	6401.670	-.820	3545.490	1.560					
99.	6401.656	-.800							

111-PLANE GADOLINIUM GALLIUM GARNET

	LPM12	LPM13	FSPVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
100.	6401.645	-0.010	3547.104	1.570	1.290	3430.291	-1.600	1.200
101.	6401.632	-0.010	3548.878	1.560	1.240	3488.592	-1.590	1.250
102.	6401.618	-0.010	3550.557	1.540	1.200	3486.909	-1.570	1.210
103.	6401.603	-0.010	3552.206	1.510	1.150	3485.256	-1.540	1.160
104.	6401.588	-0.010	3553.811	1.460	1.100	3483.647	-1.490	1.110
105.	6401.573	-0.010	3555.363	1.400	1.050	3482.091	-1.440	1.060
106.	6401.558	-0.010	3556.851	1.340	.990	3480.546	-1.380	1.000
107.	6401.543	-0.010	3558.268	1.270	.930	3479.177	-1.300	.940
108.	6401.529	-0.010	3559.606	1.200	.870	3477.635	-1.230	.880
109.	6401.514	-0.010	3560.859	1.110	.810	3476.076	-1.140	.820
110.	6401.501	-0.010	3562.021	1.030	.740	3474.512	-1.060	.750
111.	6401.488	-0.010	3563.087	.940	.670	3472.943	-960	.600
112.	6401.477	-0.010	3564.052	.840	.600	3471.375	-870	.610
113.	6401.466	-0.010	3564.913	.740	.530	3470.802	-770	.540
114.	6401.456	-0.000	3565.665	.640	.460	3470.230	-660	.470
115.	6401.448	-0.000	3566.307	.540	.380	3471.756	-560	.390
116.	6401.441	-0.000	3566.835	.430	.310	3471.112	-450	.310
117.	6401.436	-0.000	3567.248	.330	.230	3470.167	-340	.230
118.	6401.432	-0.000	3567.544	.220	.150	3469.870	-230	.150
119.	6401.430	-0.000	3567.722	.110	.080	3469.691	-110	.080
120.	6401.429	-0.000	3567.782	0.000	0.000	3469.631	0.000	-0.000
121.	6401.430	0.000	3567.722	-110	-.080	3469.691	.110	-.080
122.	6401.432	0.000	3567.544	-220	-.150	3469.870	.230	-.150
123.	6401.436	0.000	3567.248	-330	-.230	3470.167	.340	-.230
124.	6401.441	0.000	3566.835	-430	-.310	3470.582	.450	-.310
125.	6401.448	0.000	3566.307	-540	-.380	3471.112	.560	-.380
126.	6401.456	0.000	3565.665	-640	-.460	3471.756	.660	-.460
127.	6401.466	0.010	3564.913	-740	-.530	3472.511	.770	-.530
128.	6401.477	0.010	3564.052	-840	-.600	3473.375	.870	-.610
129.	6401.488	0.010	3563.087	-940	-.670	3474.343	.960	-.600
130.	6401.501	0.010	3562.021	-1.030	-.740	3475.412	1.060	-.750
131.	6401.514	0.010	3560.859	-1.110	-.810	3476.578	1.140	-.820
132.	6401.529	0.010	3559.606	-1.200	-.870	3477.835	1.230	-.880
133.	6401.543	0.010	3558.268	-1.270	-.930	3479.177	1.300	-.940
134.	6401.558	0.010	3556.851	-1.340	-.990	3480.596	1.360	-.960
135.	6401.573	0.010	3555.363	-1.400	-.1.050	3482.091	1.400	-.1.060
136.	6401.588	0.010	3553.811	-1.460	-.1.100	3483.647	1.440	-.1.110
137.	6401.603	0.010	3552.206	-1.510	-.1.150	3485.256	1.490	-.1.160
138.	6401.618	0.010	3550.558	-1.540	-.1.200	3486.909	1.540	-.1.210
139.	6401.632	0.010	3548.878	-1.560	-.1.240	3488.592	1.590	-.1.250
140.	6401.645	0.010	3547.104	-1.570	-.1.290	3490.291	1.600	-.1.200
141.	6401.658	0.010	3545.490	-1.560	-.1.320	3491.988	1.590	-.1.330
142.	6401.670	0.010	3543.819	-1.530	-.1.360	3493.662	1.560	-.1.360
143.	6401.680	0.010	3542.195	-1.470	-.1.390	3495.289	1.500	-.1.390
144.	6401.690	0.000	3540.646	-1.390	-.1.420	3496.839	1.410	-.1.410
145.	6401.698	0.000	3539.215	-1.260	-.1.440	3498.274	1.260	-.1.440
146.	6401.705	0.000	3537.935	-1.100	-.1.460	3499.552	1.110	-.1.450
147.	6401.710	0.000	3536.866	-.880	-.1.470	3500.624	.890	-.1.470
148.	6401.714	0.000	3536.054	-.620	-.1.480	3501.440	.630	-.1.480
149.	6401.716	0.000	3535.542	-.320	-.1.490	3501.952	.330	-.1.490

BULK

111-PLANE GADOLINIUM GALLIUM GARNET

	LNGLVL	LPM12	LPM13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
150.	6401.717	0.000	.908	3535.366	-0.000	-1.450	3502.127	-0.000	-1.480
151.	6401.716	-0.000	.908	3535.542	.320	-1.498	3501.952	-.330	-1.480
152.	6401.714	-0.000	.890	3536.054	.620	-1.460	3501.440	-.630	-1.460
153.	6401.710	-0.000	.890	3536.866	.880	-1.470	3500.624	-.890	-1.470
154.	6401.705	-0.000	.880	3537.939	1.100	-1.460	3499.552	-1.110	-1.450
155.	6401.698	-0.000	.870	3539.215	1.260	-1.440	3498.274	-1.280	-1.440
156.	6401.690	-0.000	.860	3540.646	1.390	-1.420	3496.839	-1.410	-1.410
157.	6401.680	-0.010	.840	3542.195	1.470	-1.390	3495.289	-1.500	-1.390
158.	6401.670	-0.010	.820	3543.619	1.530	-1.360	3493.662	-1.560	-1.360
159.	6401.658	-0.010	.800	3545.430	1.566	-1.320	3491.988	-1.590	-1.330
160.	6401.645	-0.010	.780	3547.184	1.578	-1.290	3490.291	-1.600	-1.290
161.	6401.632	-0.010	.750	3548.876	1.560	-1.248	3488.592	-1.590	-1.250
162.	6401.618	-0.010	.730	3550.556	1.540	-1.200	3486.909	-1.570	-1.210
163.	6401.603	-0.010	.700	3552.206	1.510	-1.150	3485.256	-1.540	-1.160
164.	6401.588	-0.010	.670	3553.811	1.460	-1.100	3483.547	-1.490	-1.110
165.	6401.573	-0.010	.640	3555.363	1.400	-1.050	3482.091	-1.440	-1.060
166.	6401.558	-0.010	.600	3556.851	1.340	-.990	3480.598	-1.380	-1.000
167.	6401.543	-0.010	.570	3558.266	1.270	-.930	3479.177	-1.300	-.990
168.	6401.529	-0.010	.530	3559.606	1.200	-.870	3477.835	-1.230	-.960
169.	6401.514	-0.010	.490	3560.859	1.118	-.810	3476.578	-1.140	-.920
170.	6401.501	-0.010	.450	3562.021	1.030	-.740	3475.412	-1.060	-.870
171.	6401.486	-0.010	.410	3563.087	.940	-.670	3474.343	-.960	-.800
172.	6401.477	-0.010	.370	3564.052	.840	-.600	3473.375	-.870	-.740
173.	6401.466	-0.010	.320	3564.913	.740	-.530	3472.511	-.770	-.660
174.	6401.456	-0.000	.280	3565.665	.640	-.460	3471.756	-.660	-.560
175.	6401.446	-0.000	.230	3566.307	.540	-.380	3471.112	-.560	-.490
176.	6401.441	-0.000	.190	3566.837	.430	-.310	3470.582	-.490	-.430
177.	6401.436	-0.000	.140	3567.248	.330	-.230	3470.167	-.400	-.360
178.	6401.432	-0.000	.090	3567.544	.220	-.150	3469.870	-.330	-.290
179.	6401.430	-0.000	.050	3567.722	.110	-.080	3469.691	-.210	-.160
180.	6401.429	0.000	0.000	3567.782	-0.000	-0.000	3469.631	0.000	0.000

110-PLANE GADOLINIUM GALLIUM GARNET

	LHGVEL	LPH12	LPH13	FSRVEL	FSPH12	FSPH13	SRVEL	SSPH12	SSPH13
0.	6419.387	0.000	-0.000	3502.654	1.520	-0.000	3502.653	-1.520	-0.000
1.	6419.344	-0.040	-0.000	3504.285	1.540	-0.000	3501.102	-1.340	-0.000
2.	6419.211	-0.090	-0.000	3505.934	1.550	-0.000	3493.693	-1.250	-0.000
3.	6418.988	-0.140	-0.000	3507.596	1.560	-0.000	3490.436	-1.110	-0.000
4.	6418.670	-0.190	-0.000	3509.276	1.570	-0.000	3487.335	-0.960	-0.000
5.	6418.256	-0.240	-0.000	3510.964	1.580	0.000	3486.394	-0.800	-0.000
6.	6417.749	-0.290	-0.000	3512.662	1.590	0.000	3485.627	-0.640	-0.000
7.	6417.162	-0.340	-0.000	3514.366	1.590	-0.000	3485.027	-0.480	-0.000
8.	6416.436	-0.390	-0.000	3516.076	1.600	0.000	3484.601	-0.320	-0.000
9.	6415.636	-0.440	-0.000	3517.788	1.600	0.000	3484.351	-0.150	-0.000
10.	6414.736	-0.490	-0.000	3519.501	1.600	0.000	3484.278	0.000	-0.000
11.	6413.739	-0.530	-0.000	3521.213	1.590	0.000	3484.363	0.160	-0.000
12.	6412.647	-0.580	-0.000	3522.921	1.590	0.000	3484.665	0.350	-0.000
13.	6411.462	-0.630	-0.000	3524.623	1.560	-0.000	3485.123	0.510	-0.000
14.	6410.185	-0.680	-0.000	3526.316	1.570	-0.000	3485.756	0.670	-0.000
15.	6408.820	-0.720	0.000	3528.003	1.560	-0.000	3486.559	0.830	-0.000
16.	6407.368	-0.760	-0.000	3529.677	1.550	-0.000	3487.529	0.990	-0.000
17.	6405.835	-0.810	-0.000	3531.337	1.546	-0.000	3488.663	1.140	-0.000
18.	6404.223	-0.850	-0.000	3532.981	1.520	-0.000	3489.954	1.280	-0.000
19.	6402.537	-0.880	-0.000	3534.607	1.500	0.000	3501.396	1.420	-0.000
20.	6400.781	-0.920	-0.000	3536.214	1.480	0.000	3502.983	1.550	-0.000
21.	6398.962	-0.950	-0.000	3537.795	1.460	-0.000	3504.706	1.680	-0.000
22.	6397.083	-0.980	-0.000	3539.361	1.460	0.000	3506.554	1.790	-0.000
23.	6395.151	-1.000	0.000	3540.886	1.410	0.000	3508.531	1.900	-0.000
24.	6393.172	-1.030	-0.000	3542.407	1.390	-0.000	3510.634	2.000	-0.000
25.	6391.152	-1.050	-0.000	3543.887	1.366	0.000	3512.797	2.080	-0.000
26.	6389.098	-1.060	-0.000	3545.336	1.330	0.000	3515.071	2.160	-0.000
27.	6387.016	-1.080	-0.000	3546.753	1.300	0.000	3517.423	2.230	-0.000
28.	6384.915	-1.080	-0.000	3548.136	1.260	0.000	3519.842	2.260	-0.000
29.	6382.801	-1.080	0.000	3549.483	1.230	0.000	3522.338	2.330	-0.000
30.	6380.681	-1.090	-0.000	3550.793	1.190	0.000	3524.837	2.360	-0.000
31.	6378.564	-1.090	0.000	3552.063	1.160	0.000	3527.368	2.360	-0.000
32.	6376.457	-1.080	0.000	3553.293	1.120	0.000	3529.957	2.390	-0.000
33.	6374.368	-1.070	0.000	3554.481	1.080	0.000	3532.633	2.390	-0.000
34.	6372.305	-1.050	0.000	3555.626	1.040	-0.000	3535.103	2.380	-0.000
35.	6370.275	-1.040	-0.000	3556.726	.990	0.000	3537.654	2.350	-0.000
36.	6368.286	-1.010	-0.000	3557.780	.950	0.000	3540.173	2.320	-0.000
37.	6366.347	-0.990	-0.000	3558.787	.910	-0.000	3542.648	2.270	-0.000
38.	6364.464	-0.960	-0.000	3559.746	.866	0.000	3545.067	2.210	-0.000
39.	6362.646	-0.920	-0.000	3560.655	.810	-0.000	3547.418	2.140	-0.000
40.	6360.899	-0.880	-0.000	3561.513	.770	0.000	3549.688	2.060	-0.000
41.	6359.231	-0.840	-0.000	3562.320	.720	0.000	3551.868	1.970	-0.000
42.	6357.646	-0.790	-0.000	3563.074	.670	0.000	3553.944	1.870	-0.000
43.	6356.157	-0.750	-0.000	3563.775	.620	0.000	3555.908	1.760	-0.000
44.	6354.764	-0.690	-0.000	3564.421	.570	-0.000	3557.750	1.640	-0.000
45.	6353.475	-0.640	0.000	3565.012	.520	0.000	3559.459	1.510	-0.000
46.	6352.295	-0.560	0.000	3565.566	.470	-0.000	3561.028	1.360	-0.000
47.	6351.229	-0.520	0.000	3566.027	.420	0.000	3562.448	1.240	-0.000
48.	6350.282	-0.480	-0.000	3566.450	.360	-0.000	3563.713	1.090	-0.000
49.	6349.456	-0.390	0.000	3566.815	.310	-0.000	3564.816	.940	-0.000

BULK

110-PLANE GADOLINIUM GALLIUM GARNET

BULK

	LNGLV2	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
50.	6348.761	-330	0.000	3567.122	.260	-0.000	3565.751	.760	-0.000
51.	6348.193	-.260	0.000	3567.371	.200	0.000	3566.513	.620	-0.000
52.	6347.756	-.190	0.000	3567.561	.150	0.000	3567.100	.460	-0.000
53.	6347.453	-.120	0.000	3567.693	.090	0.000	3567.507	.240	-0.000
54.	6347.286	-.050	0.000	3567.766	.040	-0.000	3567.732	.040	-0.000
55.	6347.254	.020	0.000	3567.780	-.010	-0.000	3567.775	-.010	-0.000
56.	6347.357	.090	0.000	3567.735	-.070	-0.000	3567.636	-.210	-0.000
57.	6347.596	.160	0.000	3567.631	-.120	-0.000	3567.314	-.360	-0.000
58.	6347.970	.230	0.000	3567.466	-.160	-0.000	3566.612	-.540	-0.000
59.	6348.476	.300	0.000	3567.247	-.230	-0.000	3566.132	-.710	-0.000
60.	6349.113	.360	0.000	3566.967	-.280	0.000	3565.278	-.670	-0.000
61.	6349.878	.430	0.000	3566.629	-.340	0.000	3564.254	-.620	-0.000
62.	6350.767	.490	0.000	3566.234	-.340	-0.000	3563.065	-.110	-0.000
63.	6351.777	.550	0.000	3565.781	-.440	-0.000	3561.717	-.1310	-0.000
64.	6352.904	.610	0.000	3565.272	-.490	-0.000	3560.218	-.1450	-0.000
65.	6354.142	.670	0.000	3564.707	-.550	-0.000	3558.573	-.1580	-0.000
66.	6355.487	.720	-0.000	3564.087	-.600	0.000	3556.793	-.1700	-0.000
67.	6356.932	.770	0.000	3563.411	-.650	-0.000	3554.866	-.1820	-0.000
68.	6358.473	.820	0.000	3562.682	-.700	0.000	3552.861	-.1920	-0.000
69.	6360.101	.860	0.000	3561.900	-.740	0.000	3550.729	-.2020	-0.000
70.	6361.812	.900	0.000	3561.066	-.790	-0.000	3548.580	-.2100	-0.000
71.	6363.598	.940	-0.000	3560.181	-.840	-0.000	3546.166	-.2180	-0.000
72.	6365.451	.970	-0.000	3559.246	-.890	0.000	3543.748	-.2240	-0.000
73.	6367.364	1.000	0.000	3558.262	-.930	0.000	3541.348	-.2300	-0.000
74.	6369.331	1.030	-0.000	3557.230	-.970	-0.000	3538.848	-.2340	-0.000
75.	6371.342	1.060	-0.000	3556.151	-.1020	-0.000	3536.310	-.2370	-0.000
76.	6373.391	1.090	0.000	3555.027	-.1060	-0.000	3533.748	-.2390	-0.000
77.	6375.465	1.020	0.000	3553.859	-.1100	0.000	3531.173	-.2390	-0.000
78.	6377.568	1.060	0.000	3552.649	-.1140	-0.000	3528.599	-.2370	0.000
79.	6379.681	1.090	0.000	3551.397	-.1180	0.000	3526.038	-.2370	-0.000
80.	6381.801	1.090	-0.000	3550.106	-.1210	-0.000	3523.502	-.2310	-0.000
81.	6383.916	1.090	-0.000	3548.776	-.1250	0.000	3521.005	-.2310	-0.000
82.	6386.027	1.080	0.000	3547.410	-.1260	-0.000	3518.557	-.2260	-0.000
83.	6388.118	1.070	-0.000	3546.009	-.1310	-0.000	3516.172	-.2190	-0.000
84.	6390.186	1.050	0.000	3544.575	-.1340	0.000	3513.860	-.2120	-0.000
85.	6392.223	1.040	0.000	3543.109	-.1370	-0.000	3511.633	-.2040	-0.000
86.	6394.222	1.020	-0.000	3541.613	-.1400	-0.000	3509.501	-.1950	-0.000
87.	6396.177	.990	0.000	3540.090	-.1430	-0.000	3507.475	-.1880	-0.000
88.	6398.082	.960	0.000	3538.540	-.1450	-0.000	3505.565	-.1730	-0.000
89.	6399.930	.930	0.000	3536.965	-.1470	0.000	3503.780	-.1610	-0.000
90.	6401.717	.900	0.000	3535.368	-.1490	-0.000	3502.127	-.1460	-0.000
91.	6403.436	.860	0.000	3533.751	-.1510	-0.000	3500.616	-.1350	0.000
92.	6405.083	.830	-0.000	3532.115	-.1530	0.000	3498.253	-.1210	0.000
93.	6406.655	.780	0.000	3530.462	-.1540	0.000	3496.044	-.1060	-0.000
94.	6408.145	.740	0.000	3528.795	-.1560	0.000	3493.996	-.910	-0.000
95.	6409.552	.700	-0.000	3527.115	-.1570	-0.000	3492.114	-.750	0.000
96.	6410.871	.650	-0.000	3525.424	-.1580	-0.000	3490.400	-.590	0.000
97.	6412.099	.610	0.000	3523.725	-.1590	-0.000	3490.660	-.430	-0.000
98.	6413.236	.560	0.000	3522.019	-.1590	-0.000	3490.494	-.260	-0.000
99.	6414.277	.510	0.000	3520.389	-.1600	0.000	3490.309	-.090	-0.000

110-PLANE GADOLINIUM GALLIUM GARNET

	LNGL	LNGL12	LNGL13	FSPVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	6415.223	.460	-0.000	3518.597	-1.600	0.000	3494.294	.670	-0.000
101.	6416.071	.410	-0.000	3516.884	-1.600	0.000	3494.461	.240	-0.000
102.	6416.822	.360	-0.000	3515.173	-1.600	0.000	3494.604	.400	-0.000
103.	6417.475	.310	0.000	3513.466	-1.590	0.000	3495.322	.570	-0.000
104.	6418.030	.260	-0.000	3511.764	-1.590	0.000	3496.013	.730	-0.000
105.	6418.488	.210	0.000	3510.071	-1.580	0.000	3496.672	.880	-0.000
106.	6418.850	.160	0.000	3508.386	-1.570	0.000	3497.896	1.040	-0.000
107.	6419.117	.110	0.000	3506.718	-1.560	0.000	3499.080	1.190	-0.000
108.	6419.293	.070	0.000	3505.061	-1.540	0.000	3500.418	1.320	-0.000
109.	6419.378	.020	0.000	3503.421	-1.530	0.000	3501.904	1.460	-0.000
110.	6419.375	-.020	0.000	3501.799	-1.510	0.000	3503.530	1.590	0.000
111.	6419.289	-.070	0.000	3500.198	-1.490	0.000	3505.289	1.710	0.000
112.	6419.121	-.110	0.000	3498.619	-1.470	0.000	3507.171	1.820	0.000
113.	6418.877	-.140	0.000	3497.064	-1.450	0.000	3509.169	1.920	0.000
114.	6418.559	-.180	0.000	3495.535	-1.420	0.000	3511.273	2.010	0.000
115.	6418.173	-.210	-0.000	3494.034	-1.400	0.000	3513.471	2.090	0.000
116.	6417.723	-.250	0.000	3492.563	-1.370	0.000	3515.755	2.170	0.000
117.	6417.214	-.270	0.000	3491.124	-1.340	0.000	3518.112	2.230	0.000
118.	6416.652	-.300	0.000	3489.719	-1.310	0.000	3520.532	2.280	0.000
119.	6416.040	-.320	0.000	3488.349	-1.270	0.000	3523.002	2.320	0.000
120.	6415.367	-.340	0.000	3487.016	-1.240	0.000	3525.512	2.350	0.000
121.	6414.695	-.360	0.000	3485.722	-1.200	0.000	3528.048	2.370	0.000
122.	6413.973	-.380	0.000	3484.468	-1.160	0.000	3530.600	2.370	0.000
123.	6413.225	-.390	0.000	3483.256	-1.120	0.000	3533.153	2.370	0.000
124.	6412.456	-.400	0.000	3482.087	-1.080	0.000	3535.697	2.350	0.000
125.	6411.677	-.400	0.000	3480.964	-1.040	0.000	3538.216	2.320	0.000
126.	6410.889	-.400	0.000	3479.886	-.990	0.000	3540.705	2.280	0.000
127.	6410.100	-.400	0.000	3478.856	-.950	0.000	3543.146	2.230	0.000
128.	6409.315	-.400	0.000	3477.876	-.900	0.000	3545.526	2.170	-0.000
129.	6408.540	-.390	0.000	3476.945	-.850	0.000	3547.840	2.100	-0.000
130.	6407.781	-.380	0.000	3476.066	-.810	0.000	3550.072	2.020	0.000
131.	6407.044	-.370	0.000	3475.239	-.760	0.000	3552.211	1.930	0.000
132.	6406.333	-.360	0.000	3474.466	-.700	0.000	3554.249	1.830	-0.000
133.	6405.655	-.340	0.000	3473.747	-.650	0.000	3556.174	1.720	0.000
134.	6405.013	-.320	0.000	3473.084	-.600	0.000	3557.977	1.600	0.000
135.	6404.412	-.300	0.000	3472.477	-.550	0.000	3559.650	1.480	0.000
136.	6403.857	-.270	0.000	3471.927	-.490	0.000	3561.185	1.350	-0.000
137.	6403.352	-.250	0.000	3471.435	-.440	0.000	3562.574	1.210	0.000
138.	6402.899	-.220	0.000	3471.001	-.380	0.000	3563.810	1.070	-0.000
139.	6402.503	-.190	0.000	3470.626	-.330	0.000	3564.807	.920	-0.000
140.	6402.165	-.160	0.000	3470.310	-.270	0.000	3565.600	.760	0.000
141.	6401.889	-.130	0.000	3470.054	-.210	0.000	3566.344	.610	0.000
142.	6401.677	-.090	0.000	3469.858	-.160	0.000	3567.116	.450	-0.000
143.	6401.529	-.060	0.000	3469.723	-.100	0.000	3567.513	.280	0.000
144.	6401.447	-.030	0.000	3469.648	-.040	0.000	3567.733	.120	-0.000
145.	6401.431	.010	0.000	3469.634	.020	0.000	3567.776	-.040	0.000
146.	6401.482	.040	0.000	3469.680	.070	0.000	3567.639	-.210	0.000
147.	6401.599	.060	0.000	3469.767	.130	0.000	3567.326	-.370	0.000
148.	6401.781	.110	0.000	3469.954	.190	0.000	3566.836	-.530	0.000
149.	6402.027	.140	0.000	3470.182	.240	0.000	3566.172	-.690	0.000

BULK

110-PLANE GADOLINIUM GALLIUM GARNET

BULK

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
150.	6402.336	.170	0.000	3470.469	.300	0.000	3505.336	-.650	0.000
151.	6402.705	.200	0.000	3470.816	.360	0.000	3504.338	-1.000	0.000
152.	6403.131	.230	0.000	3471.222	.410	0.000	3503.177	-1.140	0.000
153.	6403.612	.260	0.000	3471.687	.470	0.000	3501.859	-1.280	0.000
154.	6404.144	.290	0.000	3472.210	.520	0.000	3500.393	-1.420	0.000
155.	6404.724	.310	0.000	3472.790	.560	-0.000	3500.784	-1.550	0.000
156.	6405.367	.330	0.000	3473.427	.630	0.000	3507.041	-1.670	0.000
157.	6406.009	.350	0.000	3474.120	.660	0.000	3505.172	-1.780	0.000
158.	6406.705	.360	0.000	3474.867	.730	-0.000	3503.166	-1.860	0.000
159.	6407.430	.380	0.000	3475.669	.760	0.000	3501.044	-1.980	0.000
160.	6408.179	.390	0.000	3476.524	.830	0.000	3500.904	-2.070	0.000
161.	6408.947	.400	0.000	3477.450	.880	-0.000	3500.629	-2.140	0.000
162.	6409.728	.400	0.000	3478.387	.930	0.000	3500.278	-2.210	0.000
163.	6410.516	.400	0.000	3479.394	.970	0.000	3501.064	-2.260	0.000
164.	6411.306	.400	0.000	3480.449	1.020	-0.000	3500.397	-2.310	0.000
165.	6412.091	.400	0.000	3481.551	1.060	-0.000	3500.090	-2.340	0.000
166.	6412.865	.390	0.000	3482.699	1.100	0.000	3500.356	-2.360	0.000
167.	6413.623	.380	0.000	3483.891	1.140	0.000	3501.605	-2.370	0.000
168.	6414.358	.370	0.000	3485.125	1.180	-0.000	3500.252	-2.370	0.000
169.	6415.065	.350	0.000	3486.400	1.220	0.000	3500.707	-2.360	0.000
170.	6415.737	.330	0.000	3487.715	1.260	0.000	3500.183	-2.340	0.000
171.	6416.369	.310	0.000	3489.068	1.290	0.000	3500.692	-2.300	0.000
172.	6416.955	.290	0.000	3490.457	1.320	0.000	3501.247	-2.260	0.000
173.	6417.490	.260	0.000	3491.880	1.350	0.000	3500.659	-2.200	0.000
174.	6417.968	.230	0.000	3493.336	1.380	-0.000	3500.539	-2.130	0.000
175.	6418.385	.200	0.000	3494.823	1.410	0.000	3500.299	-2.050	0.000
176.	6418.736	.160	0.000	3496.339	1.440	0.000	3500.149	-1.960	0.000
177.	6419.015	.120	0.000	3497.881	1.460	-0.000	3500.101	-1.870	0.000
178.	6419.220	.080	-0.000	3499.449	1.480	-0.000	3500.162	-1.780	0.000
179.	6419.345	.040	0.000	3501.041	1.500	-0.000	3500.344	-1.640	0.000
180.	6419.387	0.000	0.000	3502.653	1.520	0.000	3502.654	-1.520	-0.000

Z-PLANE (XY-PLANE) GALLIUM ARSENIDE

	LNGVEL	LPM112	LPM113	FSRVEL	FSPH112	FSPH113	SSRVEL	SSPH112	SSPH113
0.	4733.978	8.000	0.000	3347.428	0.000	0.000	3347.428	0.000	0.000
1.	4734.923	1.310	0.000	3347.437	-0.000	0.000	3346.850	-2.620	0.000
2.	4737.765	2.598	0.000	3347.464	0.000	0.000	3342.094	-5.200	0.000
3.	4742.400	3.860	0.000	3347.509	0.050	0.000	3335.486	-7.720	0.000
4.	4748.817	5.010	0.000	3347.571	0.070	0.000	3326.343	-10.140	0.000
5.	4756.904	6.110	0.000	3347.651	0.090	0.000	3314.767	-12.430	0.000
6.	4766.549	7.110	0.000	3347.746	0.100	0.000	3300.683	-14.590	0.000
7.	4777.625	8.020	0.000	3347.861	0.120	0.000	3284.832	-16.540	0.000
8.	4789.994	8.820	0.000	3347.990	0.130	0.000	3266.789	-18.440	0.000
9.	4803.514	9.510	0.000	3348.134	0.150	0.000	3246.655	-20.140	0.000
10.	4818.041	10.100	0.000	3348.293	0.160	0.000	3225.260	-21.660	0.000
11.	4833.430	10.590	0.000	3348.466	0.160	0.000	3202.151	-23.070	0.000
12.	4849.542	10.990	0.000	3348.651	0.190	0.000	3177.698	-24.320	0.000
13.	4866.241	11.290	0.000	3348.849	0.200	0.000	3152.066	-25.440	0.000
14.	4883.399	11.500	0.000	3349.056	0.210	0.000	3125.417	-26.420	0.000
15.	4900.896	11.640	0.000	3349.277	0.220	0.000	3097.909	-27.280	0.000
16.	4918.618	11.710	0.000	3349.504	0.230	0.000	3069.693	-28.030	0.000
17.	4936.460	11.720	0.000	3349.740	0.230	0.000	3040.918	-28.660	0.000
18.	4954.326	11.660	0.000	3349.983	0.240	0.000	3011.723	-29.180	0.000
19.	4972.124	11.550	0.000	3350.230	0.250	0.000	2982.248	-29.600	0.000
20.	4989.774	11.390	0.000	3350.483	0.250	0.000	2952.622	-29.920	0.000
21.	5007.198	11.190	0.000	3350.736	0.250	0.000	2922.976	-30.140	0.000
22.	5024.328	10.950	0.000	3350.995	0.250	0.000	2893.432	-30.250	0.000
23.	5041.099	10.670	0.000	3351.253	0.250	0.000	2864.112	-30.260	0.000
24.	5057.455	10.360	0.000	3351.511	0.250	0.000	2835.132	-30.160	0.000
25.	5073.341	10.010	0.000	3351.766	0.250	0.000	2806.606	-29.980	0.000
26.	5088.708	9.650	0.000	3352.018	0.250	0.000	2778.645	-29.600	0.000
27.	5103.514	9.250	0.000	3352.266	0.240	0.000	2751.357	-29.270	0.000
28.	5117.717	8.840	0.000	3352.508	0.230	0.000	2724.847	-28.750	0.000
29.	5131.280	8.400	0.000	3352.744	0.220	0.000	2699.219	-28.100	0.000
30.	5144.170	7.950	0.000	3352.971	0.210	0.000	2674.572	-27.330	0.000
31.	5156.357	7.490	0.000	3353.190	0.200	0.000	2651.001	-26.430	0.000
32.	5167.812	7.000	0.000	3353.396	0.200	0.000	2628.500	-25.400	0.000
33.	5178.511	6.510	0.000	3353.586	0.190	0.000	2607.459	-24.230	0.000
34.	5188.432	6.000	0.000	3353.761	0.160	0.000	2587.663	-22.920	0.000
35.	5197.553	5.490	0.000	3353.953	0.160	0.000	2569.292	-21.460	0.000
36.	5205.858	4.960	0.000	3354.112	0.150	0.000	2552.424	-19.860	0.000
37.	5213.329	4.430	0.000	3354.256	0.130	0.000	2537.126	-18.120	0.000
38.	5219.954	3.890	0.000	3354.366	0.120	0.000	2523.470	-16.230	0.000
39.	5225.719	3.350	0.000	3354.448	0.100	0.000	2511.510	-14.200	0.000
40.	5230.615	2.800	0.000	3354.594	0.090	0.000	2501.296	-12.050	0.000
41.	5234.632	2.240	0.000	3354.674	0.070	0.000	2492.880	-9.750	0.000
42.	5237.763	1.680	0.000	3354.736	0.050	0.000	2486.293	-7.430	0.000
43.	5240.804	1.120	0.000	3354.791	0.040	0.000	2481.567	-5.000	0.000
44.	5243.350	0.560	0.000	3354.808	0.020	0.000	2478.723	-2.510	0.000
45.	5245.799	0.000	0.000	3354.817	0.000	0.000	2477.773	0.000	0.000
46.	5247.350	-0.560	0.000	3354.808	-0.020	0.000	2476.723	2.510	0.000
47.	5248.804	-1.120	0.000	3354.781	-0.040	0.000	2481.567	5.000	0.000
48.	5250.763	-1.680	0.000	3354.736	-0.050	0.000	2486.293	7.430	0.000
49.	5252.632	-2.240	0.000	3354.674	-0.070	0.000	2492.880	9.750	0.000

Z-PLANE (XY-PLANE) GALLIUM ARSENIDE

	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
50.	-2.000	0.000	3354.594	-0.090	0.000	2501.296	12.050	0.000
51.	-3.350	0.000	3354.498	-1.100	0.000	2511.510	14.200	0.000
52.	-3.690	0.000	3354.385	-1.120	0.000	2523.470	16.230	0.000
53.	-4.830	0.000	3354.256	-1.130	0.000	2537.128	18.120	0.000
54.	-4.960	0.000	3354.112	-1.150	0.000	2552.424	19.660	0.000
55.	-5.490	0.000	3353.953	-1.160	0.000	2569.292	21.460	0.000
56.	-6.000	0.000	3353.781	-1.160	0.000	2587.663	22.920	0.000
57.	-6.510	0.000	3353.596	-1.190	0.000	2607.459	24.230	0.000
58.	-7.000	0.000	3353.396	-1.200	0.000	2626.600	25.400	0.000
59.	-7.450	0.000	3353.190	-1.210	0.000	2651.081	26.430	0.000
60.	-7.950	0.000	3352.971	-1.220	0.000	2674.572	27.330	0.000
61.	-8.400	0.000	3352.744	-1.230	0.000	2699.219	28.100	0.000
62.	-8.840	0.000	3352.506	-1.230	0.000	2724.647	28.750	0.000
63.	-9.250	0.000	3352.266	-1.240	0.000	2751.357	29.270	0.000
64.	-9.650	0.000	3352.018	-1.250	0.000	2776.645	29.660	0.000
65.	-10.010	0.000	3351.766	-1.250	0.000	2806.606	29.980	0.000
66.	-10.360	0.000	3351.511	-1.250	0.000	2835.132	30.160	0.000
67.	-10.670	0.000	3351.253	-1.250	0.000	2864.112	30.260	0.000
68.	-10.950	0.000	3350.995	-1.250	0.000	2893.432	30.250	0.000
69.	-11.190	0.000	3350.736	-1.250	0.000	2922.976	30.140	0.000
70.	-11.390	0.000	3350.483	-1.250	0.000	2952.622	29.920	0.000
71.	-11.550	0.000	3350.230	-1.250	0.000	2982.248	29.600	0.000
72.	-11.660	0.000	3349.983	-1.240	0.000	3011.723	29.160	0.000
73.	-11.720	0.000	3349.740	-1.230	0.000	3040.916	28.660	0.000
74.	-11.710	0.000	3349.504	-1.230	0.000	3069.693	28.030	0.000
75.	-11.640	0.000	3349.277	-1.220	0.000	3097.909	27.260	0.000
76.	-11.500	0.000	3349.056	-1.210	0.000	3125.417	26.420	0.000
77.	-11.290	0.000	3348.849	-1.200	0.000	3152.066	25.440	0.000
78.	-10.980	0.000	3348.651	-1.190	0.000	3177.698	24.320	0.000
79.	-10.590	0.000	3348.466	-1.160	0.000	3202.151	23.070	0.000
80.	-10.100	0.000	3348.293	-1.160	0.000	3225.260	21.660	0.000
81.	-9.510	0.000	3348.134	-1.150	0.000	3246.655	20.140	0.000
82.	-8.820	0.000	3347.990	-1.130	0.000	3266.769	18.440	0.000
83.	-8.020	0.000	3347.861	-1.120	0.000	3284.832	16.590	0.000
84.	-7.110	0.000	3347.746	-1.100	0.000	3300.883	14.590	0.000
85.	-6.110	0.000	3347.651	-0.990	0.000	3314.767	12.430	0.000
86.	-5.010	0.000	3347.571	-0.700	0.000	3326.343	10.140	0.000
87.	-3.640	0.000	3347.509	-0.500	0.000	3335.486	7.720	0.000
88.	-2.590	0.000	3347.464	-0.400	0.000	3342.994	5.200	0.000
89.	-1.310	0.000	3347.437	0.000	0.000	3346.990	2.620	0.000
90.	0.000	0.000	3347.426	0.000	0.000	3347.426	0.000	0.000
91.	1.310	0.000	3347.437	0.000	0.000	3346.990	-2.620	0.000
92.	2.590	0.000	3347.464	0.400	0.000	3342.994	-5.200	0.000
93.	3.640	0.000	3347.509	0.500	0.000	3335.486	-7.720	0.000
94.	4.740	0.000	3347.571	0.700	0.000	3326.343	-10.140	0.000
95.	5.840	0.000	3347.651	0.990	0.000	3314.767	-12.430	0.000
96.	6.940	0.000	3347.746	1.100	0.000	3300.883	-14.590	0.000
97.	8.040	0.000	3347.861	1.200	0.000	3284.832	-16.590	0.000
98.	9.140	0.000	3347.990	1.300	0.000	3266.769	-18.440	0.000
99.	10.240	0.000	3348.134	1.500	0.000	3246.655	-20.140	0.000

BULK

Z-PLANE (XY-PLANE) GALLIUM ARSENIDE

BULK

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	4818.041	10.100	0.000	3348.293	.160	0.000	3225.260	-21.680	0.000
101.	4833.430	18.590	0.000	3348.466	.180	0.000	3202.151	-23.070	0.000
102.	4849.542	18.980	0.000	3348.651	.190	0.000	3177.698	-24.320	0.000
103.	4866.241	11.250	0.000	3348.849	.200	0.000	3152.066	-25.440	0.000
104.	4883.399	11.500	0.000	3349.058	.210	0.000	3125.417	-26.420	0.000
105.	4900.896	11.640	0.000	3349.277	.220	0.000	3097.909	-27.280	0.000
106.	4918.618	11.710	0.000	3349.504	.230	0.000	3069.693	-28.030	0.000
107.	4936.460	11.720	0.000	3349.740	.230	0.000	3040.918	-28.660	0.000
108.	4954.326	11.660	0.000	3349.983	.240	0.000	3011.723	-29.180	0.000
109.	4972.124	11.550	0.000	3350.230	.250	0.000	2982.248	-29.600	0.000
110.	4989.774	11.390	0.000	3350.483	.250	0.000	2952.622	-29.920	0.000
111.	5007.156	11.190	0.000	3350.736	.250	0.000	2922.976	-30.140	0.000
112.	5024.326	10.950	0.000	3350.995	.250	0.000	2893.432	-30.250	0.000
113.	5041.099	10.670	0.000	3351.253	.250	0.000	2864.112	-30.260	0.000
114.	5057.455	10.360	0.000	3351.511	.250	0.000	2835.132	-30.180	0.000
115.	5073.341	10.010	0.000	3351.766	.250	0.000	2806.606	-29.960	0.000
116.	5088.706	9.610	0.000	3352.016	.250	0.000	2778.645	-29.660	0.000
117.	5103.514	9.250	0.000	3352.266	.240	0.000	2751.357	-29.270	0.000
118.	5117.717	8.840	0.000	3352.506	.230	0.000	2724.847	-28.750	0.000
119.	5131.280	8.400	0.000	3352.744	.230	0.000	2699.219	-28.100	0.000
120.	5144.170	7.950	0.000	3352.971	.220	0.000	2674.572	-27.330	0.000
121.	5156.357	7.490	0.000	3353.190	.210	0.000	2651.001	-26.430	0.000
122.	5167.812	7.000	0.000	3353.396	.200	0.000	2628.600	-25.400	0.000
123.	5178.511	6.510	0.000	3353.596	.190	0.000	2607.459	-24.230	0.000
124.	5188.432	6.000	0.000	3353.781	.180	0.000	2587.663	-22.920	0.000
125.	5197.553	5.490	0.000	3353.953	.160	0.000	2569.292	-21.460	0.000
126.	5205.858	4.960	0.000	3354.112	.150	0.000	2552.424	-19.860	0.000
127.	5213.329	4.430	0.000	3354.256	.130	0.000	2537.128	-18.120	0.000
128.	5219.954	3.890	0.000	3354.385	.120	0.000	2523.470	-16.230	0.000
129.	5225.719	3.350	0.000	3354.496	.100	0.000	2511.510	-14.200	0.000
130.	5230.615	2.800	0.000	3354.594	.090	0.000	2501.298	-12.050	0.000
131.	5234.632	2.240	0.000	3354.674	.070	0.000	2492.880	-9.790	0.000
132.	5237.763	1.680	0.000	3354.736	.050	0.000	2486.293	-7.430	0.000
133.	5240.004	1.120	0.000	3354.781	.040	0.000	2481.567	-5.000	0.000
134.	5241.350	.560	0.000	3354.808	.020	0.000	2476.723	-2.510	0.000
135.	5241.799	-0.000	0.000	3354.817	-0.000	0.000	2477.773	0.000	0.000
136.	5241.350	-0.560	0.000	3354.808	-0.020	0.000	2476.723	2.510	0.000
137.	5237.763	-1.120	0.000	3354.781	-0.040	0.000	2481.567	5.000	0.000
138.	5234.632	-1.680	0.000	3354.736	-0.050	0.000	2486.293	7.430	0.000
139.	5230.615	-2.240	0.000	3354.674	-0.070	0.000	2492.880	9.790	0.000
140.	5225.719	-2.800	0.000	3354.594	-0.090	0.000	2501.298	12.050	0.000
141.	5219.954	-3.350	0.000	3354.496	-0.100	0.000	2511.510	14.200	0.000
142.	5213.329	-3.890	0.000	3354.385	-0.120	0.000	2523.470	16.230	0.000
143.	5205.858	-4.430	0.000	3354.256	-0.130	0.000	2537.128	18.120	0.000
144.	5197.553	-4.960	0.000	3354.112	-0.150	0.000	2552.424	19.860	0.000
145.	5188.432	-5.490	0.000	3353.953	-0.160	0.000	2569.292	21.460	0.000
146.	5178.511	-6.000	0.000	3353.781	-0.180	0.000	2587.663	22.920	0.000
147.	5167.812	-6.510	0.000	3353.596	-0.190	0.000	2607.459	24.230	0.000
148.	5156.357	-7.000	0.000	3353.396	-0.200	0.000	2628.600	25.400	0.000
149.	5144.170	-7.490	0.000	3353.190	-0.210	0.000	2651.001	26.430	0.000

2-PLANE (XY-PLANE) GALLIUM ARSENIDE

BULK

	LNGWEL	LPM12	LPM13	FSPH12	FSPH13	SSRVEL	SSPM12	SSPM13
150.	5144.170	-7.950	0.000	-220	0.000	2674.572	27.330	0.000
151.	5131.280	-8.400	0.000	-230	0.000	2693.215	26.100	0.000
152.	5117.717	-8.848	0.000	-230	0.000	2754.947	26.750	0.000
153.	5103.514	-9.250	0.000	-240	0.000	2751.357	29.270	0.000
154.	5088.708	-9.650	0.000	-250	0.000	2778.645	29.680	0.000
155.	5073.341	-10.010	0.000	-250	0.000	2806.606	29.960	0.000
156.	5057.455	-10.340	0.000	-250	0.000	2835.132	30.180	0.000
157.	5041.099	-10.670	0.000	-250	0.000	2864.112	30.260	0.000
158.	5024.328	-10.950	0.000	-250	0.000	2893.432	30.250	0.000
159.	5007.198	-11.150	0.000	-250	0.000	2922.976	30.140	0.000
160.	4989.774	-11.350	0.000	-250	0.000	2952.622	29.920	0.000
161.	4972.124	-11.550	0.000	-250	0.000	2982.248	29.500	0.000
162.	4954.326	-11.660	0.000	-240	0.000	3011.723	29.180	0.000
163.	4936.468	-11.720	0.000	-230	0.000	3040.916	28.660	0.000
164.	4918.618	-11.710	0.000	-230	0.000	3069.693	28.030	0.000
165.	4900.896	-11.640	0.000	-220	0.000	3097.909	27.260	0.000
166.	4883.399	-11.500	0.000	-210	0.000	3125.417	26.420	0.000
167.	4866.241	-11.290	0.000	-200	0.000	3152.066	25.440	0.000
168.	4849.542	-10.980	0.000	-190	0.000	3177.696	24.320	0.000
169.	4833.430	-10.550	0.000	-180	0.000	3202.151	23.070	0.000
170.	4818.041	-10.100	0.000	-160	0.000	3225.260	21.660	0.000
171.	4803.514	-9.510	0.000	-150	0.000	3246.955	20.140	0.000
172.	4789.994	-8.820	0.000	-130	0.000	3266.769	18.440	0.000
173.	4777.625	-8.020	0.000	-120	0.000	3284.332	16.590	0.000
174.	4766.545	-7.110	0.000	-100	0.000	3300.863	14.540	0.000
175.	4756.904	-6.110	0.000	-80	0.000	3314.767	12.430	0.000
176.	4748.817	-5.010	0.000	-60	0.000	3326.343	10.140	0.000
177.	4742.400	-3.840	0.000	-40	0.000	3335.466	7.720	0.000
178.	4737.745	-2.590	0.000	-20	0.000	3342.094	5.200	0.000
179.	4734.923	-1.310	0.000	0	0.000	3346.090	2.620	0.000
180.	4733.978	0.000	0.000	-0.000	0.000	3347.428	0.000	0.000

111-PLANE GALLIUM ARSENIDE

	LMGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
0.	5241.799	-0.000	0.000	3354.817	-0.000	0.000	2677.773	0.000	-0.000
1.	5241.887	-110	480	3354.293	-1.030	-7.10	2676.297	1.390	-0.000
2.	5242.149	-220	950	3352.723	-2.050	-1.420	2679.867	2.770	-1.590
3.	5242.581	-320	1420	3350.115	-3.060	-2.130	2682.475	4.120	-2.300
4.	5243.180	-430	1880	3346.461	-4.060	-2.630	2686.110	5.450	-3.150
5.	5243.937	-520	2340	3341.836	-5.040	-3.520	2690.756	6.740	-3.910
6.	5244.843	-610	2790	3336.206	-6.000	-4.200	2696.390	7.990	-4.650
7.	5245.888	-690	3220	3329.614	-6.930	-4.670	2702.987	9.190	-5.370
8.	5247.059	-770	3650	3322.092	-7.830	-5.520	2710.517	10.330	-6.080
9.	5248.342	-830	4060	3313.677	-8.700	-6.160	2718.942	11.390	-6.730
10.	5249.722	-890	4460	3304.410	-9.530	-6.760	2728.222	12.390	-7.370
11.	5251.184	-940	4840	3294.338	-10.310	-7.380	2738.310	13.300	-7.960
12.	5252.710	-970	5200	3283.513	-11.040	-8.030	2749.155	14.140	-8.550
13.	5254.284	-990	5550	3271.993	-11.720	-8.530	2760.699	14.800	-9.100
14.	5255.887	-1010	5880	3259.844	-12.330	-9.070	2772.876	15.520	-9.650
15.	5257.501	-1010	6190	3247.137	-12.880	-9.550	2785.613	16.060	-10.000
16.	5259.110	-1000	6490	3233.954	-13.350	-10.050	2798.830	16.490	-10.400
17.	5260.695	-980	6760	3220.385	-13.730	-10.560	2812.436	16.800	-10.870
18.	5262.240	-950	7010	3206.534	-14.000	-11.010	2826.326	16.980	-11.220
19.	5263.728	-910	7250	3192.516	-14.160	-11.430	2840.382	17.010	-11.530
20.	5265.143	-860	7460	3178.472	-14.170	-11.830	2854.469	16.670	-11.800
21.	5266.471	-800	7650	3164.552	-14.030	-12.210	2868.429	16.350	-12.030
22.	5267.897	-730	7820	3150.942	-13.600	-12.560	2882.079	16.000	-12.220
23.	5269.311	-660	7980	3137.853	-13.100	-12.860	2895.205	15.200	-12.380
24.	5269.799	-570	8110	3125.534	-12.250	-13.170	2907.559	14.110	-12.500
25.	5270.653	-490	8220	3114.267	-11.070	-13.430	2918.656	12.670	-12.590
26.	5271.363	-400	8310	3104.370	-9.530	-13.650	2928.779	10.850	-12.650
27.	5271.923	-300	8380	3096.180	-7.610	-13.840	2938.990	8.620	-12.690
28.	5272.327	-200	8430	3090.026	-5.330	-13.970	2948.294	6.010	-12.710
29.	5272.571	-100	8460	3086.203	-2.750	-14.060	2956.992	3.090	-12.720
30.	5272.652	-0.000	8470	3084.904	0.000	-14.050	2964.992	0.000	-12.720
31.	5272.571	-100	8460	3086.203	2.750	-14.060	2972.436	-3.090	-12.710
32.	5272.327	-200	8430	3090.026	5.330	-13.970	2979.294	-6.010	-12.690
33.	5271.923	-300	8380	3096.180	7.610	-13.840	2985.429	-8.620	-12.650
34.	5271.363	-400	8310	3104.370	9.530	-13.650	2990.779	-10.850	-12.600
35.	5270.653	-490	8220	3114.267	11.070	-13.430	2995.205	-12.670	-12.500
36.	5269.799	-570	8110	3125.534	12.250	-13.170	2998.759	-14.110	-12.380
37.	5268.811	-660	7980	3137.853	13.100	-12.860	2999.205	-15.200	-12.220
38.	5267.897	-730	7820	3150.942	13.600	-12.560	2998.079	-16.000	-12.030
39.	5266.471	-800	7650	3164.552	14.030	-12.210	2995.429	-16.550	-11.800
40.	5265.143	-860	7460	3178.472	14.170	-11.830	2991.469	-16.670	-11.530
41.	5263.728	-910	7250	3192.516	14.160	-11.430	2986.382	-17.010	-11.220
42.	5262.240	-950	7010	3206.534	14.000	-11.010	2980.326	-16.980	-10.870
43.	5260.695	-980	6760	3220.385	13.730	-10.560	2972.436	-16.800	-10.400
44.	5259.110	-1008	6490	3233.954	13.350	-10.090	2962.831	-16.490	-10.000
45.	5257.581	-1010	6190	3247.137	12.880	-9.590	2951.613	-16.160	-9.550
46.	5255.887	-1010	5880	3259.844	12.330	-9.070	2938.830	-15.520	-9.050
47.	5254.284	-990	5550	3271.993	11.720	-8.530	2924.876	-14.800	-8.550
48.	5252.710	-970	5200	3283.513	11.040	-8.030	2909.156	-14.140	-8.050
49.	5251.184	-940	4840	3294.338	10.310	-7.360	2891.310	-13.300	-7.370

BULK

111-PLANE GALLIUM ARSENIDE

BULK

	LNGVEL	LPH12	LPH13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
50.	5249.722	-850	4.460	3384.410	9.530	-6.760	2528.222	-12.390	-7.370
51.	5248.342	-830	4.060	3313.677	8.700	-6.160	2518.942	-11.390	-6.730
52.	5247.059	-770	3.650	3322.092	7.830	-5.520	2510.517	-10.330	-6.060
53.	5245.888	-690	3.220	3329.614	6.930	-4.870	2502.987	-9.190	-5.370
54.	5244.843	-610	2.790	3336.206	6.000	-4.200	2496.390	-7.990	-4.650
55.	5243.937	-520	2.340	3341.838	5.040	-3.520	2490.756	-6.740	-3.910
56.	5243.140	-430	1.880	3346.481	4.060	-2.830	2486.110	-5.450	-3.150
57.	5242.561	-320	1.420	3350.115	3.060	-2.130	2482.475	-4.120	-2.360
58.	5242.149	-220	.950	3352.723	2.050	-1.420	2479.867	-2.770	-1.590
59.	5241.887	-110	.480	3354.293	1.030	-0.710	2478.297	-1.390	-0.800
60.	5241.799	0.000	0.000	3354.817	-0.000	0.000	2477.773	-0.000	-0.000
61.	5241.887	.110	-.480	3354.293	-1.030	.710	2478.297	1.390	.800
62.	5242.149	.220	-.950	3352.723	-2.050	1.420	2479.867	2.770	1.590
63.	5242.561	.320	-1.420	3350.115	-3.060	2.130	2482.475	4.120	2.360
64.	5243.140	.430	-1.880	3346.481	-4.060	2.830	2486.110	5.450	3.150
65.	5243.937	.520	-2.340	3341.838	-5.040	3.520	2490.756	6.740	3.910
66.	5244.843	.610	-2.790	3336.206	-6.000	4.200	2496.390	7.990	4.650
67.	5245.888	.690	-3.220	3329.614	-6.930	4.870	2502.987	9.190	5.370
68.	5247.059	.770	-3.650	3322.092	-7.830	5.520	2510.516	10.330	6.060
69.	5248.342	.830	-4.060	3313.677	-8.700	6.160	2518.942	11.390	6.730
70.	5249.722	.850	-4.460	3304.410	-9.530	6.760	2528.222	12.390	7.370
71.	5251.104	.940	-4.840	3294.338	-10.310	7.360	2538.310	13.300	7.960
72.	5252.710	.970	-5.200	3283.513	-11.040	7.970	2549.155	14.140	8.550
73.	5254.284	.990	-5.550	3271.993	-11.720	8.530	2560.699	14.880	9.090
74.	5255.887	1.010	-5.880	3259.844	-12.330	9.070	2572.876	15.520	9.590
75.	5257.582	1.010	-6.190	3247.137	-12.860	9.590	2585.613	16.060	10.030
76.	5259.110	1.000	-6.490	3233.954	-13.350	10.090	2598.630	16.490	10.460
77.	5260.655	.980	-6.760	3220.385	-13.730	10.560	2612.436	16.800	10.870
78.	5262.240	.950	-7.010	3206.534	-14.000	11.010	2626.326	16.980	11.220
79.	5263.726	.910	-7.250	3192.516	-14.160	11.430	2640.382	17.010	11.530
80.	5265.143	.860	-7.460	3178.472	-14.170	11.630	2654.464	16.670	11.800
81.	5266.471	.800	-7.650	3164.552	-14.030	12.210	2668.429	16.550	12.030
82.	5267.698	.730	-7.820	3150.942	-13.660	12.560	2682.078	16.000	12.220
83.	5268.811	.660	-7.980	3137.853	-13.100	12.660	2695.204	15.200	12.360
84.	5269.799	.570	-8.110	3125.533	-12.250	13.170	2716.856	14.110	12.500
85.	5270.653	.490	-8.220	3114.267	-11.070	13.430	2736.990	12.670	12.590
86.	5271.363	.400	-8.310	3104.370	-9.530	13.650	2756.779	10.650	12.650
87.	5271.923	.300	-8.380	3096.140	-7.610	13.640	2776.940	8.620	12.690
88.	5272.327	.200	-8.430	3090.826	-5.330	13.970	2796.991	6.010	12.710
89.	5272.571	.100	-8.460	3086.283	-2.750	14.060	2816.991	3.090	12.720
90.	5272.653	0.000	-8.470	3084.984	0.000	14.090	2836.991	-0.000	12.720
91.	5272.571	-.100	-8.460	3086.283	2.750	14.060	2856.991	-3.090	12.720
92.	5272.327	-.200	-8.430	3090.826	5.330	13.970	2876.991	-6.010	12.710
93.	5271.923	-.300	-8.380	3096.140	7.610	13.640	2896.990	-8.620	12.690
94.	5271.363	-.400	-8.310	3104.370	9.530	13.650	2916.991	-10.650	12.650
95.	5270.653	-.490	-8.220	3114.267	11.070	13.430	2936.991	-12.670	12.590
96.	5269.799	-.570	-8.110	3125.533	12.250	13.170	2956.991	-14.110	12.500
97.	5268.811	-.660	-7.980	3137.853	13.100	12.660	2976.991	-15.200	12.360
98.	5267.698	-.730	-7.820	3150.942	13.660	12.560	2996.991	-16.000	12.220
99.	5266.471	-.800	-7.650	3164.552	14.030	12.210	3016.991	-16.550	12.030

111-PLANE GALLIUM ARSENIDE

BULK

	LNCEL	LPH112	LPH113	FSRVEL	FSPH112	FSPH113	SSRVEL	SSPH112	SSPH113
100.	5265.143	-0.860	-7.460	3178.472	14.170	11.630	2654.469	-16.670	11.600
101.	5263.728	-0.910	-7.250	3192.518	14.160	11.430	2648.382	-17.010	11.530
102.	5262.290	-0.960	-7.010	3206.534	14.000	11.010	2626.326	-16.500	11.220
103.	5260.695	-0.980	-6.760	3220.385	13.730	10.560	2612.436	-16.800	10.870
104.	5259.110	-1.000	-6.490	3233.954	13.350	10.090	2596.630	-16.490	10.460
105.	5257.502	-1.010	-6.190	3247.137	12.860	9.590	2585.613	-16.060	10.050
106.	5255.867	-1.010	-5.860	3259.844	12.330	9.070	2572.876	-15.520	9.590
107.	5254.284	-0.990	-5.550	3271.993	11.720	8.530	2560.099	-14.880	9.090
108.	5252.710	-0.970	-5.200	3283.513	11.040	7.970	2549.155	-14.140	8.590
109.	5251.144	-0.940	-4.840	3294.336	10.310	7.360	2538.310	-13.300	8.090
110.	5249.722	-0.890	-4.460	3304.410	9.530	6.760	2528.222	-12.390	7.590
111.	5248.342	-0.830	-4.060	3313.677	8.700	6.160	2518.942	-11.390	7.090
112.	5247.059	-0.770	-3.650	3322.092	7.830	5.520	2510.517	-10.330	6.590
113.	5245.868	-0.690	-3.220	3329.614	6.930	4.870	2502.987	-9.190	6.090
114.	5244.843	-0.610	-2.790	3336.206	6.000	4.200	2496.390	-7.990	5.590
115.	5243.937	-0.520	-2.340	3341.838	5.040	3.520	2490.756	-6.740	5.090
116.	5243.180	-0.430	-1.880	3346.461	4.060	2.830	2486.110	-5.450	4.590
117.	5242.581	-0.320	-1.420	3350.115	3.060	2.130	2482.475	-4.120	4.090
118.	5242.149	-0.220	-0.950	3352.723	2.050	1.420	2479.867	-2.770	3.590
119.	5241.887	-0.110	-0.480	3354.293	1.030	0.710	2477.773	-1.390	3.090
120.	5241.799	-0.000	0.000	3354.817	0.000	0.000	2476.297	0.000	2.590
121.	5241.887	0.110	0.480	3354.293	-1.030	-0.710	2474.467	1.390	2.090
122.	5242.149	0.220	0.950	3352.723	-2.050	-1.420	2472.475	2.770	1.590
123.	5242.581	0.320	1.420	3350.115	-3.060	-2.130	2470.756	4.120	1.090
124.	5243.180	0.430	1.880	3346.461	-4.060	-2.830	2468.110	5.450	0.590
125.	5243.937	0.520	2.340	3341.838	-5.040	-3.520	2465.756	6.740	0.090
126.	5244.843	0.610	2.790	3336.206	-6.000	-4.200	2463.390	7.990	-0.410
127.	5245.868	0.690	3.220	3329.614	-6.930	-4.870	2502.987	9.190	-0.910
128.	5247.059	0.770	3.650	3322.092	-7.830	-5.520	2510.517	10.330	-1.410
129.	5248.342	0.830	4.060	3313.677	-8.700	-6.160	2518.942	11.390	-1.910
130.	5249.722	0.890	4.460	3304.410	-9.530	-6.760	2528.222	12.390	-2.410
131.	5251.144	0.940	4.840	3294.336	-10.310	-7.360	2538.310	13.300	-2.910
132.	5252.710	0.970	5.200	3283.513	-11.040	-7.970	2549.155	14.140	-3.410
133.	5254.284	0.990	5.550	3271.993	-11.720	-8.530	2560.099	14.880	-3.910
134.	5255.867	1.010	5.860	3259.844	-12.330	-9.070	2572.876	15.520	-4.410
135.	5257.501	1.010	6.190	3247.137	-12.860	-9.590	2585.613	16.060	-4.910
136.	5259.110	1.000	6.490	3233.954	-13.350	-10.090	2596.631	16.490	-5.410
137.	5260.695	0.980	6.760	3220.385	-13.730	-10.560	2612.436	16.800	-5.910
138.	5262.290	0.960	7.010	3206.534	-14.000	-11.010	2626.326	16.980	-6.410
139.	5263.728	0.910	7.250	3192.518	-14.160	-11.430	2648.382	17.010	-6.910
140.	5265.143	0.860	7.460	3178.472	-14.170	-11.630	2654.469	17.010	-7.410
141.	5266.471	0.800	7.650	3164.552	-14.030	-12.210	2668.429	16.950	-7.910
142.	5267.697	0.730	7.820	3150.942	-13.680	-12.560	2682.079	16.000	-8.410
143.	5268.811	0.660	7.980	3137.853	-13.100	-12.880	2695.205	15.200	-8.910
144.	5269.799	0.570	8.110	3125.534	-12.250	-13.170	2707.559	14.110	-9.410
145.	5270.653	0.450	8.220	3114.267	-11.070	-13.430	2716.856	12.670	-9.910
146.	5271.363	0.400	8.310	3104.370	-9.530	-13.650	2728.774	10.690	-10.410
147.	5271.923	0.300	8.380	3096.180	-7.610	-13.840	2736.990	8.620	-10.910
148.	5272.327	0.260	8.430	3090.028	-5.330	-13.970	2743.157	6.010	-11.410
149.	5272.571	0.100	8.460	3086.283	-2.750	-14.060	2746.992	3.090	-11.910

111-PLANE GALLIUM ARSENIDE

BULK

	LMGVEL	LPM112	LPM113	FSRVEL	FSPH112	FSPH113	SSRVEL	SSPH112	SSPH113
150.	5272.652	0.000	6.470	3084.904	-0.000	-14.090	2746.294	-0.000	-12.720
151.	5272.571	-1.00	6.460	3086.203	2.756	-14.060	2746.992	-3.090	-12.720
152.	5272.327	-2.00	6.430	3090.028	5.330	-13.970	2743.157	-6.010	-12.710
153.	5271.923	-3.00	6.380	3096.180	7.610	-13.840	2736.990	-8.620	-12.650
154.	5271.363	-4.00	6.310	3104.370	9.530	-13.650	2726.779	-10.650	-12.650
155.	5270.653	-4.90	6.220	3114.267	11.070	-13.430	2718.656	-12.670	-12.550
156.	5269.799	-5.70	6.110	3125.534	12.250	-13.170	2707.559	-14.110	-12.560
157.	5268.811	-6.60	7.980	3137.853	13.100	-12.860	2695.205	-15.200	-12.360
158.	5267.697	-7.30	7.820	3150.942	13.680	-12.560	2682.079	-16.000	-12.220
159.	5266.471	-8.00	7.650	3164.552	14.030	-12.210	2668.429	-16.550	-12.030
160.	5265.143	-8.60	7.460	3178.472	14.170	-11.830	2654.469	-16.870	-11.800
161.	5263.728	-9.10	7.250	3192.516	14.160	-11.430	2640.382	-17.010	-11.530
162.	5262.240	-9.50	7.010	3206.534	14.000	-11.010	2626.326	-16.500	-11.220
163.	5260.695	-9.80	6.760	3220.585	13.730	-10.560	2612.436	-16.000	-10.870
164.	5259.110	-1.000	6.490	3233.954	13.350	-10.050	2598.630	-16.450	-10.480
165.	5257.501	-1.010	6.190	3247.137	12.860	-9.590	2585.613	-16.860	-10.050
166.	5255.867	-1.010	5.880	3259.844	12.330	-9.070	2572.676	-15.520	-9.550
167.	5254.284	-9.90	5.550	3271.993	11.720	-8.530	2560.699	-14.660	-9.000
168.	5252.710	-9.70	5.200	3283.513	11.040	-7.970	2549.155	-14.140	-8.550
169.	5251.184	-9.40	4.840	3294.338	10.310	-7.380	2538.310	-13.300	-7.980
170.	5249.722	-8.90	4.460	3304.410	9.530	-6.760	2528.222	-12.390	-7.370
171.	5248.342	-8.50	4.060	3313.677	8.700	-6.160	2518.942	-11.390	-6.730
172.	5247.059	-7.70	3.650	3322.092	7.830	-5.520	2510.517	-10.330	-6.060
173.	5245.886	-6.90	3.220	3329.614	6.930	-4.870	2502.987	-9.190	-5.370
174.	5244.843	-6.10	2.790	3336.206	6.000	-4.200	2496.390	-7.990	-4.650
175.	5243.937	-5.20	2.340	3341.836	5.040	-3.520	2490.756	-6.740	-3.910
176.	5243.180	-4.30	1.880	3346.481	4.060	-2.830	2486.110	-5.450	-3.150
177.	5242.581	-3.60	1.420	3350.115	3.060	-2.130	2482.475	-4.120	-2.380
178.	5242.149	-2.20	.950	3352.723	2.050	-1.420	2479.667	-2.770	-1.590
179.	5241.887	-1.10	.480	3354.293	1.030	-0.710	2476.297	-1.390	-0.800
180.	5241.799	0.000	-0.000	3354.817	-0.000	0.000	2477.773	0.000	0.000

110-PLANE GALLIUM ARSENIDE

	LNVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	5406.502	0.000	-0.000	2797.062	-10.970	0.000	2797.050	16.970	-0.000
1.	5406.250	-4.400	-0.000	2793.472	-15.940	-0.000	2612.796	16.940	0.000
2.	5405.245	-0.020	0.000	2770.140	-14.010	-0.000	2627.027	16.960	0.000
3.	5403.554	-1.240	-0.000	2757.923	-13.590	-0.000	2642.423	16.540	0.000
4.	5401.165	-1.670	-0.000	2746.877	-12.290	-0.000	2656.066	16.900	-0.000
5.	5398.060	-2.100	-0.000	2737.051	-10.900	-0.000	2673.235	16.640	-0.000
6.	5394.256	-2.540	-0.000	2728.491	-9.430	-0.000	2686.412	16.750	0.000
7.	5389.723	-2.980	-0.000	2721.236	-7.900	-0.000	2503.580	16.650	0.000
8.	5384.463	-3.420	-0.000	2715.326	-6.300	-0.000	2510.719	16.530	0.000
9.	5378.475	-3.870	-0.000	2710.747	-4.650	-0.000	2933.011	16.390	-0.000
10.	5371.757	-4.320	-0.000	2707.645	-2.950	-0.000	2948.460	16.240	0.000
11.	5364.306	-4.770	-0.000	2705.917	-1.230	-0.000	2963.768	16.070	0.000
12.	5356.133	-5.220	-0.000	2705.616	.510	-0.000	2978.638	15.890	0.000
13.	5347.233	-5.670	-0.000	2706.755	2.256	-0.000	2993.374	15.690	-0.000
14.	5337.614	-6.110	-0.000	2709.327	3.980	-0.000	3007.979	15.470	0.000
15.	5327.203	-6.550	-0.000	2713.329	5.650	-0.000	3022.437	15.250	-0.000
16.	5316.250	-6.990	-0.000	2718.751	7.360	-0.000	3036.735	15.010	0.000
17.	5304.524	-7.430	-0.000	2725.575	9.080	-0.000	3050.855	14.760	0.000
18.	5292.117	-7.850	0.000	2733.778	10.550	-0.000	3064.784	14.500	0.000
19.	5279.044	-8.260	0.000	2743.330	12.040	-0.000	3078.506	14.220	-0.000
20.	5265.321	-8.690	0.000	2754.197	13.470	-0.000	3092.012	13.930	-0.000
21.	5250.967	-9.090	-0.000	2766.338	14.810	-0.000	3105.203	13.640	0.000
22.	5236.000	-9.460	-0.000	2774.708	16.060	-0.000	3118.308	13.330	0.000
23.	5220.444	-9.860	-0.000	2794.257	17.220	-0.000	3131.074	13.020	0.000
24.	5204.323	-10.230	-0.000	2809.927	18.290	-0.000	3143.569	12.690	0.000
25.	5187.665	-10.580	-0.000	2826.660	19.260	-0.000	3155.781	12.360	0.000
26.	5170.500	-10.920	-0.000	2844.390	20.140	-0.000	3167.699	12.020	0.000
27.	5152.861	-11.240	0.000	2863.046	20.910	-0.000	3179.311	11.660	0.000
28.	5134.783	-11.530	0.000	2882.556	21.590	-0.000	3190.607	11.310	0.000
29.	5116.306	-11.800	0.000	2902.841	22.170	-0.000	3201.576	10.940	-0.000
30.	5097.472	-12.050	-0.000	2923.819	22.650	-0.000	3212.286	10.570	0.000
31.	5078.328	-12.270	-0.000	2945.403	23.030	-0.000	3222.494	10.190	0.000
32.	5058.925	-12.460	-0.000	2967.503	23.320	-0.000	3232.425	9.810	0.000
33.	5039.317	-12.620	0.000	2990.024	23.510	-0.000	3241.992	9.410	0.000
34.	5019.564	-12.740	-0.000	3012.865	23.600	-0.000	3251.166	9.020	0.000
35.	4999.731	-12.820	-0.000	3035.925	23.580	-0.000	3259.999	8.620	0.000
36.	4979.889	-12.850	0.000	3059.094	23.470	-0.000	3268.495	8.210	0.000
37.	4960.113	-12.830	0.000	3082.259	23.260	-0.000	3276.455	7.800	0.000
38.	4940.485	-12.760	0.000	3105.303	22.940	-0.000	3284.082	7.360	0.000
39.	4921.094	-12.630	0.000	3128.103	22.520	-0.000	3291.301	6.960	0.000
40.	4902.035	-12.430	0.000	3150.530	21.980	-0.000	3298.105	6.540	0.000
41.	4883.410	-12.170	0.000	3172.452	21.330	-0.000	3304.489	6.110	0.000
42.	4865.326	-11.820	0.000	3193.731	20.560	-0.000	3310.447	5.680	0.000
43.	4847.898	-11.400	0.000	3214.224	19.670	-0.000	3315.974	5.240	0.000
44.	4831.245	-10.690	0.000	3233.787	18.650	-0.000	3321.066	4.810	0.000
45.	4815.493	-10.290	0.000	3252.270	17.500	-0.000	3325.927	4.370	-0.000
46.	4800.769	-9.600	0.000	3269.523	16.210	-0.000	3329.927	3.920	0.000
47.	4787.283	-8.610	0.000	3285.399	14.790	-0.000	3333.669	3.460	0.000
48.	4774.921	-7.920	0.000	3299.749	13.230	-0.000	3337.001	3.030	0.000
49.	4764.049	-6.940	0.000	3312.435	11.540	-0.000	3339.061	2.590	0.000

BULK

110-PLANE GALLIUM ARSENIIDE

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
50.	4754.784	-5.888	0.000	3333.335	9.740	-0.000	3342.266	2.140	0.000
51.	4749.992	-4.730	0.000	3332.301	7.820	-0.000	3344.214	1.690	0.000
52.	4741.807	-3.520	0.000	3339.262	5.800	-0.000	3345.703	1.240	-0.000
53.	4738.821	-2.260	0.000	3344.125	3.720	-0.000	3346.733	.780	0.000
54.	4734.498	-.960	0.000	3346.833	1.600	0.000	3347.303	.330	0.000
55.	4734.044	.350	0.000	3347.412	-.120	0.000	3347.351	-.570	0.000
56.	4735.488	1.650	0.000	3345.674	-2.720	-0.000	3347.060	-1.020	-0.000
57.	4738.883	2.930	0.000	3341.823	-4.830	-0.000	3346.247	-1.470	-0.000
58.	4743.947	4.170	0.000	3335.843	-6.880	0.000	3344.374	-1.920	0.000
59.	4750.854	5.350	0.000	3327.907	-8.840	0.000	3343.242	-2.370	-0.000
60.	4759.441	6.450	0.000	3317.886	-10.710	0.000	3341.053	-2.820	-0.000
61.	4769.606	7.470	0.000	3305.952	-12.450	0.000	3338.407	-3.270	-0.000
62.	4781.238	8.400	0.000	3292.371	-14.070	0.000	3335.388	-3.710	-0.000
63.	4794.214	9.240	0.000	3277.197	-15.560	0.000	3331.758	-4.160	-0.000
64.	4808.408	9.970	0.000	3260.576	-16.910	0.000	3327.760	-4.600	-0.000
65.	4823.691	10.620	0.000	3242.654	-18.120	0.000	3323.317	-5.040	-0.000
66.	4839.934	11.170	0.000	3223.593	-19.200	0.000	3318.432	-5.470	-0.000
67.	4857.011	11.630	0.000	3203.510	-20.160	0.000	3313.110	-5.900	-0.000
68.	4874.880	12.010	0.000	3182.584	-20.980	0.000	3307.354	-6.330	-0.000
69.	4893.184	12.310	0.000	3160.946	-21.650	0.000	3301.171	-6.760	-0.000
70.	4912.051	12.540	0.000	3138.743	-22.260	0.000	3294.565	-7.160	-0.000
71.	4931.297	12.700	0.000	3116.103	-22.760	0.000	3287.541	-7.500	-0.000
72.	4950.825	12.800	0.000	3093.159	-23.120	0.000	3280.105	-7.800	-0.000
73.	4970.542	12.850	0.000	3070.035	-23.390	0.000	3272.264	-8.010	-0.000
74.	4990.362	12.840	0.000	3046.854	-23.550	0.000	3264.025	-8.420	-0.000
75.	5010.209	12.760	-0.000	3023.729	-23.600	0.000	3255.394	-8.830	-0.000
76.	5030.088	12.600	0.000	3000.771	-23.560	-0.000	3246.378	-9.230	-0.000
77.	5049.692	12.540	0.000	2978.086	-23.420	0.000	3236.286	-9.620	-0.000
78.	5069.199	12.370	0.000	2955.776	-23.180	0.000	3227.226	-10.010	-0.000
79.	5088.472	12.160	-0.000	2933.937	-22.840	0.000	3217.107	-10.390	-0.000
80.	5107.458	11.930	0.000	2912.662	-22.410	0.000	3206.837	-10.770	-0.000
81.	5126.109	11.660	0.000	2892.035	-21.880	0.000	3195.625	-11.140	-0.000
82.	5144.381	11.360	0.000	2872.453	-21.250	0.000	3184.683	-11.500	-0.000
83.	5162.232	11.070	0.000	2853.084	-20.520	0.000	3173.219	-11.850	-0.000
84.	5179.625	10.740	-0.000	2834.908	-19.690	0.000	3161.444	-12.200	-0.000
85.	5196.526	10.400	0.000	2817.697	-18.760	0.000	3149.369	-12.530	-0.000
86.	5212.984	10.040	-0.000	2801.517	-17.740	0.000	3137.086	-12.660	-0.000
87.	5228.729	9.660	-0.000	2786.432	-16.620	0.000	3124.366	-13.160	-0.000
88.	5243.977	9.260	0.000	2772.499	-15.410	0.000	3111.462	-13.500	-0.000
89.	5258.623	8.880	0.000	2759.772	-14.110	0.000	3098.305	-13.600	-0.000
90.	5272.647	8.470	-0.000	2748.296	-12.730	0.000	3084.910	-14.090	-0.000
91.	5286.029	8.050	0.000	2738.120	-11.260	0.000	3071.288	-14.370	-0.000
92.	5298.752	7.630	-0.000	2729.277	-9.730	0.000	3057.454	-14.640	-0.000
93.	5310.881	7.200	0.000	2721.799	-8.130	0.000	3043.422	-14.890	-0.000
94.	5322.162	6.760	0.000	2715.713	-6.480	0.000	3029.207	-15.140	-0.000
95.	5332.826	6.320	0.000	2711.038	-4.790	0.000	3014.822	-15.370	-0.000
96.	5342.762	5.880	0.000	2707.790	-3.070	0.000	3000.284	-15.590	-0.000
97.	5352.022	5.430	0.000	2705.976	-1.330	0.000	2985.608	-15.790	-0.000
98.	5360.540	4.980	-0.000	2705.558	-.410	0.000	2970.810	-15.940	-0.000
99.	5368.332	4.530	-0.000	2706.652	2.140	0.000	2955.307	-16.160	-0.000

BULK

110-PLANE GALLIUM ARSENIDE

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
100.	5375.395	4.080	-0.000	2709.126	3.850	0.000	2940.914	-16.320	-0.000
101.	5381.728	3.640	0.000	2713.011	5.520	0.000	2925.849	-16.470	-0.000
102.	5387.331	3.190	0.000	2718.278	7.150	0.000	2910.730	-16.600	-0.000
103.	5392.206	2.750	0.000	2724.902	8.720	0.000	2895.574	-16.710	-0.000
104.	5396.358	2.310	0.000	2732.051	10.220	0.000	2880.399	-16.800	-0.000
105.	5399.792	1.870	0.000	2742.084	11.640	0.000	2865.223	-16.870	-0.000
106.	5402.514	1.440	0.000	2752.561	12.990	0.000	2850.066	-16.930	-0.000
107.	5404.533	1.020	0.000	2764.231	14.250	0.000	2834.946	-16.970	-0.000
108.	5405.861	.600	0.000	2777.044	15.420	0.000	2819.861	-16.990	-0.000
109.	5406.508	.190	0.000	2790.942	16.490	0.000	2804.893	-16.990	-0.000
110.	5406.490	-.210	0.000	2805.865	17.460	0.000	2789.994	-16.950	-0.000
111.	5405.823	-.600	0.000	2821.748	18.360	0.000	2775.221	-16.900	-0.000
112.	5404.523	-.960	0.000	2838.524	19.150	0.000	2760.578	-16.820	-0.000
113.	5402.611	-1.340	0.000	2856.123	19.840	0.000	2746.090	-16.730	0.000
114.	5400.108	-1.700	0.000	2874.470	20.440	0.000	2731.777	-16.610	-0.000
115.	5397.039	-2.030	0.000	2893.491	20.950	0.000	2717.660	-16.460	-0.000
116.	5393.428	-2.360	0.000	2913.106	21.360	0.000	2703.760	-16.290	-0.000
117.	5389.306	-2.660	0.000	2933.235	21.690	0.000	2690.096	-16.090	0.000
118.	5384.700	-2.950	0.000	2953.797	21.920	0.000	2676.686	-15.860	0.000
119.	5379.645	-3.210	0.000	2974.707	22.080	0.000	2663.559	-15.610	0.000
120.	5374.175	-3.460	0.000	2995.880	22.140	0.000	2650.727	-15.320	0.000
121.	5368.327	-3.680	0.000	3017.229	22.120	0.000	2638.212	-15.010	0.000
122.	5362.140	-3.880	0.000	3038.666	22.020	0.000	2626.035	-14.670	0.000
123.	5355.657	-4.050	0.000	3060.101	21.840	0.000	2614.215	-14.310	0.000
124.	5348.922	-4.190	0.000	3081.445	21.580	0.000	2602.772	-13.910	0.000
125.	5341.981	-4.310	0.000	3102.606	21.230	0.000	2591.725	-13.480	0.000
126.	5334.884	-4.400	0.000	3123.497	20.810	0.000	2581.092	-13.020	0.000
127.	5327.680	-4.450	0.000	3144.022	20.310	0.000	2570.891	-12.540	0.000
128.	5320.423	-4.470	0.000	3164.091	19.730	0.000	2561.140	-12.020	0.000
129.	5313.167	-4.460	0.000	3183.612	19.060	0.000	2551.856	-11.460	-0.000
130.	5305.969	-4.420	0.000	3202.647	18.340	0.000	2543.056	-10.910	0.000
131.	5298.884	-4.330	0.000	3220.647	17.530	0.000	2534.755	-10.310	0.000
132.	5291.972	-4.210	0.000	3237.983	16.650	0.000	2526.969	-9.680	0.000
133.	5285.290	-4.060	0.000	3254.415	15.690	0.000	2519.712	-9.030	0.000
134.	5278.897	-3.870	0.000	3269.656	14.650	0.000	2512.997	-8.350	-0.000
135.	5272.846	-3.640	0.000	3284.230	13.550	0.000	2506.837	-7.650	-0.000
136.	5267.200	-3.380	0.000	3297.455	12.370	0.000	2501.244	-6.930	-0.000
137.	5262.005	-3.090	0.000	3309.457	11.140	0.000	2496.227	-6.190	0.000
138.	5257.315	-2.760	0.000	3320.171	9.840	0.000	2491.796	-5.430	0.000
139.	5253.175	-2.400	0.000	3329.532	8.460	0.000	2487.984	-4.650	0.000
140.	5249.627	-2.020	0.000	3337.486	7.060	0.000	2484.732	-3.860	-0.000
141.	5246.707	-1.620	0.000	3343.984	5.630	0.000	2482.110	-3.060	-0.000
142.	5244.447	-1.200	0.000	3348.987	4.150	0.000	2480.101	-2.250	-0.000
143.	5242.869	-.770	0.000	3352.464	2.650	0.000	2478.711	-1.430	-0.000
144.	5241.992	-.330	0.000	3354.394	1.130	0.000	2477.942	-.610	0.000
145.	5241.824	.110	0.000	3354.762	-.400	-0.000	2477.795	.220	0.000
146.	5242.367	.560	0.000	3353.569	-1.930	0.000	2476.271	1.040	0.000
147.	5243.616	1.000	0.000	3350.820	-3.450	-0.000	2479.368	1.660	0.000
148.	5245.556	1.430	0.000	3346.534	-4.940	0.000	2481.089	2.600	0.000
149.	5248.168	1.840	0.000	3340.737	-6.400	-0.000	2483.418	3.490	0.000

BULK

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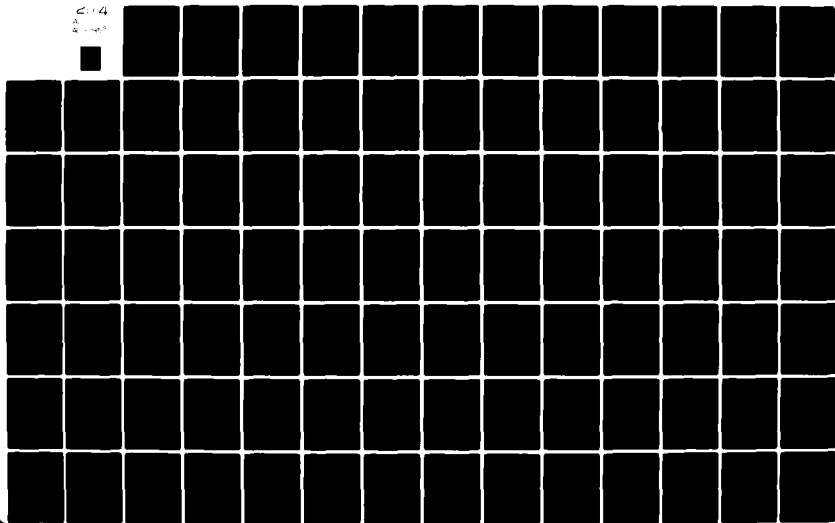
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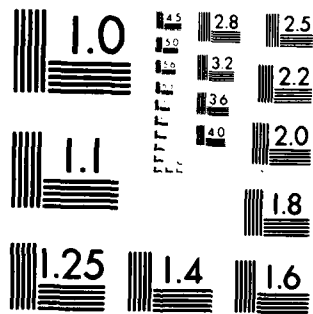
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963-A

110-PLANE GALLIUM ARSENIDE

BULK

	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
150.	5251.424	2.230	0.000	3333.465	-7.830	-0.000	2486.363	4.280	0.000
151.	5255.289	2.600	0.000	3324.761	-9.200	-0.000	2489.313	5.060	0.000
152.	5259.726	2.940	0.000	3314.679	-10.530	-0.000	2494.063	5.830	0.000
153.	5264.688	3.250	0.000	3303.276	-11.800	-0.000	2498.804	6.540	0.000
154.	5270.129	3.520	0.000	3290.620	-13.006	-0.000	2504.126	7.310	0.000
155.	5275.955	3.770	0.000	3276.780	-14.140	-0.000	2510.020	8.020	0.000
156.	5282.233	3.970	0.000	3261.832	-15.210	-0.000	2516.474	8.710	0.000
157.	5288.786	4.150	0.000	3245.857	-16.200	-0.000	2523.477	9.380	0.000
158.	5295.597	4.280	0.000	3228.937	-17.120	-0.000	2531.015	10.020	0.000
159.	5302.607	4.380	0.000	3211.156	-17.970	-0.000	2539.075	10.630	0.000
160.	5309.759	4.440	0.000	3192.604	-18.740	-0.000	2547.641	11.210	0.000
161.	5316.955	4.470	0.000	3173.376	-19.430	-0.000	2556.699	11.770	0.000
162.	5324.256	4.470	0.000	3153.597	-20.050	-0.000	2566.231	12.300	0.000
163.	5331.494	4.430	0.000	3133.236	-20.590	-0.000	2576.222	12.600	0.000
164.	5338.648	4.360	0.000	3112.507	-21.050	-0.000	2586.653	13.270	0.000
165.	5345.669	4.250	0.000	3091.462	-21.430	-0.000	2597.507	13.710	0.000
166.	5352.507	4.120	0.000	3070.193	-21.730	-0.000	2608.766	14.120	0.000
167.	5359.114	3.960	0.000	3048.789	-21.950	-0.000	2620.411	14.500	0.000
168.	5365.446	3.780	0.000	3027.342	-22.090	-0.000	2632.421	14.860	0.000
169.	5371.459	3.560	0.000	3005.940	-22.140	-0.000	2644.779	15.180	0.000
170.	5377.113	3.330	0.000	2984.673	-22.120	-0.000	2657.464	15.480	0.000
171.	5382.368	3.070	0.000	2963.629	-22.010	-0.000	2670.455	15.740	0.000
172.	5387.190	2.800	0.000	2942.892	-21.810	-0.000	2683.734	15.980	0.000
173.	5391.545	2.500	0.000	2922.546	-21.530	-0.000	2697.274	16.190	0.000
174.	5395.480	2.190	0.000	2902.680	-21.150	-0.000	2711.071	16.380	0.000
175.	5398.768	1.860	0.000	2883.369	-20.690	-0.000	2725.086	16.540	0.000
176.	5401.502	1.510	0.000	2864.694	-20.130	-0.000	2739.311	16.670	0.000
177.	5403.695	1.150	0.000	2846.733	-19.460	-0.000	2753.719	16.760	0.000
178.	5405.287	.760	0.000	2829.559	-18.740	-0.000	2768.291	16.800	0.000
179.	5406.255	.400	0.000	2813.246	-17.900	-0.000	2783.004	16.830	0.000
180.	5406.562	0.000	-0.000	2797.862	-16.970	-0.000	2797.850	16.970	0.000

Z-PLANE (XY-PLANE) GERMANIUM

BULK

	LMVEL	LPN12	LPN13	FSRVEL	FSPN12	FSPN13	SSRVEL	SSPN12	SSPN13
0.	4924.230	0.000	0.000	3548.800	0.000	0.000	3548.800	0.000	0.000
1.	4925.114	1.170	0.000	3547.584	-2.250	0.000	3548.800	0.000	0.000
2.	4927.731	2.310	0.000	3543.949	-6.470	0.000	3548.800	-0.000	0.000
3.	4932.045	3.420	0.000	3537.937	-6.630	0.000	3548.800	0.000	0.000
4.	4938.008	4.640	0.000	3529.615	-8.720	0.000	3548.800	0.000	0.000
5.	4945.524	5.470	0.000	3519.076	-10.710	0.000	3548.800	0.000	0.000
6.	4954.499	6.360	0.000	3506.430	-12.580	0.000	3548.800	0.000	0.000
7.	4964.818	7.200	0.000	3491.803	-14.330	0.000	3548.800	0.000	0.000
8.	4976.360	7.940	0.000	3475.334	-15.950	0.000	3548.800	-0.000	0.000
9.	4988.994	8.580	0.000	3457.172	-17.440	0.000	3548.800	0.000	0.000
10.	4982.591	9.130	0.000	3437.469	-18.600	0.000	3548.800	-0.000	0.000
11.	5017.817	9.590	0.000	3416.379	-20.020	0.000	3548.800	0.000	0.000
12.	5032.145	9.970	0.000	3394.057	-21.120	0.000	3548.800	0.000	0.000
13.	5047.848	10.260	0.000	3370.656	-22.100	0.000	3548.800	0.000	0.000
14.	5064.006	10.480	0.000	3346.331	-22.960	0.000	3548.800	0.000	0.000
15.	5080.510	10.630	0.000	3321.223	-23.700	0.000	3548.800	0.000	0.000
16.	5097.249	10.710	0.000	3295.476	-24.340	0.000	3548.800	0.000	0.000
17.	5114.124	10.730	0.000	3269.227	-24.870	0.000	3548.800	0.000	0.000
18.	5131.042	10.690	0.000	3242.609	-25.310	0.000	3548.800	0.000	0.000
19.	5147.916	10.610	0.000	3215.750	-25.640	0.000	3548.800	0.000	0.000
20.	5164.671	10.480	0.000	3188.774	-25.860	0.000	3548.800	0.000	0.000
21.	5181.228	10.300	0.000	3161.800	-26.020	0.000	3548.800	0.000	0.000
22.	5197.522	10.050	0.000	3134.944	-26.060	0.000	3548.800	0.000	0.000
23.	5213.490	9.840	0.000	3108.315	-26.020	0.000	3548.800	0.000	0.000
24.	5229.076	9.560	0.000	3082.023	-25.870	0.000	3548.800	0.000	0.000
25.	5244.227	9.260	0.000	3056.172	-25.640	0.000	3548.800	0.000	0.000
26.	5258.896	8.920	0.000	3030.862	-25.300	0.000	3548.800	0.000	0.000
27.	5273.037	8.570	0.000	3006.191	-24.670	0.000	3548.800	0.000	0.000
28.	5286.612	8.190	0.000	2982.254	-24.330	0.000	3548.800	-0.000	0.000
29.	5299.584	7.790	0.000	2959.141	-23.700	0.000	3548.800	0.000	0.000
30.	5311.919	7.380	0.000	2936.941	-22.960	0.000	3548.800	-0.000	0.000
31.	5323.586	6.950	0.000	2915.739	-22.110	0.000	3548.800	0.000	0.000
32.	5334.559	6.510	0.000	2895.614	-21.160	0.000	3548.800	0.000	0.000
33.	5344.812	6.050	0.000	2876.645	-20.090	0.000	3548.800	-0.000	0.000
34.	5354.323	5.580	0.000	2858.904	-18.920	0.000	3548.800	0.000	0.000
35.	5363.071	5.100	0.000	2842.459	-17.640	0.000	3548.800	0.000	0.000
36.	5371.830	4.620	0.000	2827.376	-16.250	0.000	3548.800	0.000	0.000
37.	5378.208	4.120	0.000	2813.714	-14.750	0.000	3548.800	0.000	0.000
38.	5384.566	3.620	0.000	2801.526	-13.160	0.000	3548.800	0.000	0.000
39.	5390.102	3.120	0.000	2790.862	-11.470	0.000	3548.800	0.000	0.000
40.	5394.803	2.600	0.000	2781.764	-9.700	0.000	3548.800	0.000	0.000
41.	5398.661	2.040	0.000	2774.269	-7.860	0.000	3548.800	0.000	0.000
42.	5401.669	1.570	0.000	2768.407	-5.950	0.000	3548.800	0.000	0.000
43.	5403.821	1.050	0.000	2764.203	-3.990	0.000	3548.800	0.000	0.000
44.	5405.114	.520	0.000	2761.674	-2.010	0.000	3548.800	0.000	0.000
45.	5405.546	0.000	0.000	2760.830	0.000	0.000	3548.800	0.000	0.000
46.	5405.114	-.520	0.000	2761.674	2.010	0.000	3548.800	0.000	0.000
47.	5403.821	-1.050	0.000	2764.203	3.990	0.000	3548.800	0.000	0.000
48.	5401.669	-1.570	0.000	2768.407	5.950	0.000	3548.800	0.000	0.000
49.	5398.661	-2.050	0.000	2774.269	7.860	0.000	3548.800	0.000	0.000

Z-PLANE (XY-PLANE) GERMANIUM

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SRVEL	SSPH12	SSPH13
50.	9394.803	-2.600	0.000	2781.764	9.700	0.000	3546.800	0.000	0.000
51.	9398.102	-3.128	0.000	2790.862	11.470	0.000	3546.800	0.000	0.000
52.	9384.966	-3.620	0.000	2801.526	13.160	0.000	3546.800	0.000	0.000
53.	9376.208	-4.120	0.000	2813.714	14.750	0.000	3546.800	0.000	0.000
54.	9371.810	-4.620	0.000	2827.376	16.250	0.000	3546.800	0.000	0.000
55.	9363.871	-5.100	0.000	2842.499	17.640	0.000	3546.800	0.000	0.000
56.	9354.323	-5.580	0.000	2858.904	18.926	0.000	3546.800	0.000	0.000
57.	9344.812	-6.050	0.000	2876.645	20.090	0.000	3546.800	0.000	0.000
58.	9334.599	-6.518	0.000	2895.614	21.160	0.000	3546.800	0.000	0.000
59.	9323.506	-6.950	0.000	2915.739	22.110	0.000	3546.800	0.000	0.000
60.	9311.919	-7.360	0.000	2936.941	22.960	0.000	3546.800	0.000	0.000
61.	9299.384	-7.750	0.000	2959.141	23.700	0.000	3546.800	0.000	0.000
62.	9286.612	-8.190	0.000	2982.254	24.330	0.000	3546.800	0.000	0.000
63.	9273.837	-8.570	0.000	3006.191	24.870	0.000	3546.800	0.000	0.000
64.	9259.896	-8.920	0.000	3030.862	25.300	0.000	3546.800	0.000	0.000
65.	9244.227	-9.260	0.000	3056.172	25.640	0.000	3546.800	0.000	0.000
66.	9228.076	-9.560	0.000	3082.023	25.870	0.000	3546.800	0.000	0.000
67.	9213.498	-9.840	0.000	3108.315	26.020	0.000	3546.800	0.000	0.000
68.	9197.522	-10.090	0.000	3134.944	26.060	0.000	3546.800	0.000	0.000
69.	9181.228	-10.300	0.000	3161.800	26.020	0.000	3546.800	0.000	0.000
70.	9164.671	-10.460	0.000	3188.774	25.860	0.000	3546.800	0.000	0.000
71.	9147.916	-10.610	0.000	3215.750	25.640	0.000	3546.800	0.000	0.000
72.	9131.042	-10.650	0.000	3242.609	25.310	0.000	3546.800	0.000	0.000
73.	9114.124	-10.730	0.000	3269.227	24.870	0.000	3546.800	0.000	0.000
74.	9097.249	-10.710	0.000	3295.476	24.340	0.000	3546.800	0.000	0.000
75.	9080.510	-10.630	0.000	3321.223	23.700	0.000	3546.800	0.000	0.000
76.	9064.008	-10.460	0.000	3346.331	22.960	0.000	3546.800	0.000	0.000
77.	9047.848	-10.260	0.000	3370.654	22.100	0.000	3546.800	0.000	0.000
78.	9032.145	-9.970	0.000	3394.057	21.120	0.000	3546.800	0.000	0.000
79.	9017.017	-9.590	0.000	3416.379	20.020	0.000	3546.800	0.000	0.000
80.	9002.591	-9.130	0.000	3437.469	17.600	0.000	3546.800	0.000	0.000
81.	9008.994	-8.560	0.000	3457.172	17.446	0.000	3546.800	0.000	0.000
82.	9076.360	-7.940	0.000	3475.334	15.950	0.000	3546.800	0.000	0.000
83.	9064.818	-7.200	0.000	3491.833	14.330	0.000	3546.800	0.000	0.000
84.	9054.499	-6.350	0.000	3506.430	12.560	0.000	3546.800	0.000	0.000
85.	9044.524	-5.478	0.000	3519.876	10.710	0.000	3546.800	0.000	0.000
86.	9032.808	-4.460	0.000	3529.615	6.720	0.000	3546.800	0.000	0.000
87.	9022.049	-3.420	0.000	3537.937	6.630	0.000	3546.800	0.000	0.000
88.	9027.731	-2.310	0.000	3543.969	4.470	0.000	3546.800	0.000	0.000
89.	9025.114	-1.170	0.000	3547.564	2.250	0.000	3546.800	0.000	0.000
90.	9022.236	0.000	0.000	3548.800	-0.000	0.000	3546.800	0.000	0.000
91.	9029.114	1.170	0.000	3547.564	-2.250	0.000	3546.800	0.000	0.000
92.	9027.731	2.310	0.000	3543.969	-4.470	0.000	3546.800	0.000	0.000
93.	9032.809	3.420	0.000	3537.937	-6.630	0.000	3546.800	0.000	0.000
94.	9030.808	4.460	0.000	3529.615	-8.720	0.000	3546.800	0.000	0.000
95.	9045.524	5.478	0.000	3519.876	-10.710	0.000	3546.800	0.000	0.000
96.	9054.499	6.350	0.000	3506.430	-12.560	0.000	3546.800	0.000	0.000
97.	9064.818	7.200	0.000	3491.833	-14.330	0.000	3546.800	0.000	0.000
98.	9076.360	7.940	0.000	3475.334	-15.950	0.000	3546.800	0.000	0.000
99.	9080.994	8.560	0.000	3457.172	-17.446	0.000	3546.800	0.000	0.000

Z-PLANE (XY-PLANE) GERMANIUM

	LNVEL	LPHI12	LPHI13	FSRWEL	FSPH12	FSPH13	SSRWEL	SSPH12	SSPH13
100.	5002.591	9.130	0.000	3437.469	-16.800	0.000	3546.800	0.000	0.000
101.	5017.017	9.590	0.000	3416.379	-20.020	0.000	3546.800	-0.000	0.000
102.	5032.145	9.970	0.000	3394.057	-21.120	0.000	3546.800	0.000	0.000
103.	5047.846	10.260	0.000	3370.658	-22.100	0.000	3546.800	0.000	0.000
104.	5064.008	10.480	0.000	3346.331	-22.960	0.000	3546.800	0.000	0.000
105.	5080.510	10.630	0.000	3321.223	-23.700	0.000	3546.800	0.000	0.000
106.	5097.249	10.710	0.000	3295.476	-24.340	0.000	3546.800	0.000	0.000
107.	5114.124	10.730	0.000	3269.227	-24.870	0.000	3546.800	0.000	0.000
108.	5131.042	10.650	0.000	3242.605	-25.310	0.000	3546.800	0.000	0.000
109.	5147.918	10.610	0.000	3215.750	-25.640	0.000	3546.800	0.000	0.000
110.	5164.671	10.460	0.000	3188.774	-25.860	0.000	3546.800	0.000	0.000
111.	5181.228	10.300	0.000	3161.800	-26.020	0.000	3546.800	-0.000	0.000
112.	5197.522	10.090	0.000	3134.944	-26.060	0.000	3546.800	0.000	0.000
113.	5213.490	9.840	0.000	3108.315	-26.020	0.000	3546.800	0.000	0.000
114.	5229.076	9.560	0.000	3082.023	-25.870	0.000	3546.800	0.000	0.000
115.	5244.227	9.260	0.000	3056.172	-25.640	0.000	3546.800	0.000	0.000
116.	5258.696	8.920	0.000	3030.862	-25.300	0.000	3546.800	0.000	0.000
117.	5273.037	8.570	0.000	3006.191	-24.870	0.000	3546.800	0.000	0.000
118.	5286.612	8.190	0.000	2982.294	-24.330	0.000	3546.800	0.000	0.000
119.	5299.584	7.790	0.000	2959.141	-23.700	0.000	3546.800	-0.000	0.000
120.	5311.919	7.360	0.000	2936.941	-22.960	0.000	3546.800	0.000	0.000
121.	5323.586	6.950	0.000	2915.739	-22.110	0.000	3546.800	0.000	0.000
122.	5334.559	6.510	0.000	2895.614	-21.160	0.000	3546.800	0.000	0.000
123.	5344.812	6.050	0.000	2876.645	-20.090	0.000	3546.800	0.000	0.000
124.	5354.323	5.580	0.000	2858.984	-18.920	0.000	3546.800	0.000	0.000
125.	5363.071	5.100	0.000	2842.459	-17.640	0.000	3546.800	0.000	0.000
126.	5371.036	4.620	0.000	2827.376	-16.250	0.000	3546.800	0.000	0.000
127.	5378.208	4.120	0.000	2813.714	-14.750	0.000	3546.800	0.000	0.000
128.	5384.566	3.620	0.000	2801.526	-13.160	0.000	3546.800	-0.000	0.000
129.	5390.102	3.120	0.000	2790.862	-11.470	0.000	3546.800	0.000	0.000
130.	5394.803	2.600	0.000	2781.764	-9.700	0.000	3546.800	0.000	0.000
131.	5398.661	2.090	0.000	2774.269	-7.860	0.000	3546.800	0.000	0.000
132.	5401.669	1.570	0.000	2768.407	-5.950	0.000	3546.800	0.000	0.000
133.	5403.821	1.050	0.000	2764.203	-3.990	0.000	3546.800	0.000	0.000
134.	5405.114	.520	0.000	2761.674	-2.010	0.000	3546.800	0.000	0.000
135.	5405.546	-0.000	0.000	2760.830	0.000	0.000	3546.800	0.000	0.000
136.	5405.114	-.520	0.000	2761.674	2.010	0.000	3546.800	0.000	0.000
137.	5403.821	-1.050	0.000	2764.203	3.990	0.000	3546.800	0.000	0.000
138.	5401.669	-1.570	0.000	2768.407	5.950	0.000	3546.800	0.000	0.000
139.	5398.661	-2.090	0.000	2774.269	7.860	0.000	3546.800	0.000	0.000
140.	5394.803	-2.600	0.000	2781.764	9.700	0.000	3546.800	0.000	0.000
141.	5390.102	-3.120	0.000	2790.862	11.470	0.000	3546.800	0.000	0.000
142.	5384.566	-3.620	0.000	2801.526	13.160	0.000	3546.800	-0.000	0.000
143.	5378.208	-4.120	0.000	2813.714	14.750	0.000	3546.800	0.000	0.000
144.	5371.036	-4.620	0.000	2827.376	16.250	0.000	3546.800	0.000	0.000
145.	5363.071	-5.100	0.000	2842.459	17.640	0.000	3546.800	-0.000	0.000
146.	5354.323	-5.580	0.000	2858.984	18.920	0.000	3546.800	0.000	0.000
147.	5344.812	-6.050	0.000	2876.645	20.090	0.000	3546.800	0.000	0.000
148.	5334.559	-6.510	0.000	2895.614	21.160	0.000	3546.800	0.000	0.000
149.	5323.586	-6.950	0.000	2915.739	22.110	0.000	3546.800	0.000	0.000

Z-PLANE (XY-PLANE) GERMANIUM									
	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
150.	5311.919	-7.360	0.000	2836.941	22.960	0.000	3546.800	0.000	0.000
151.	5299.564	-7.790	0.000	2959.141	23.700	0.000	3546.800	0.000	0.000
152.	5286.612	-8.190	0.000	2982.254	24.330	0.000	3546.800	0.000	0.000
153.	5273.037	-8.570	0.000	3006.191	24.870	0.000	3546.800	0.000	0.000
154.	5258.096	-8.920	0.000	3030.862	25.300	0.000	3546.800	0.000	0.000
155.	5244.227	-9.260	0.000	3056.172	25.640	0.000	3546.800	0.000	0.000
156.	5229.076	-9.560	0.000	3082.023	25.870	0.000	3546.800	-0.000	0.000
157.	5213.490	-9.840	0.000	3108.515	26.020	0.000	3546.800	0.000	0.000
158.	5197.522	-10.090	0.000	3134.944	26.060	0.000	3546.800	-0.000	0.000
159.	5181.226	-10.300	0.000	3161.800	26.020	0.000	3546.800	0.000	0.000
160.	5164.671	-10.460	0.000	3188.774	25.800	0.000	3546.800	0.000	0.000
161.	5147.916	-10.610	0.000	3215.750	25.640	0.000	3546.800	0.000	0.000
162.	5131.042	-10.690	0.000	3242.609	25.310	0.000	3546.800	0.000	0.000
163.	5114.124	-10.730	0.000	3269.227	24.870	0.000	3546.800	-0.000	0.000
164.	5097.249	-10.710	0.000	3295.476	24.340	0.000	3546.800	0.000	0.000
165.	5080.510	-10.630	0.000	3321.223	23.700	0.000	3546.800	0.000	0.000
166.	5064.086	-10.480	0.000	3346.331	22.960	0.000	3546.800	0.000	0.000
167.	5047.846	-10.260	0.000	3370.650	22.100	0.000	3546.800	0.000	0.000
168.	5032.145	-9.970	0.000	3394.057	21.120	0.000	3546.800	0.000	0.000
169.	5017.017	-9.550	0.000	3416.379	20.020	0.000	3546.800	-0.000	0.000
170.	5002.591	-9.130	0.000	3437.469	18.800	0.000	3546.800	0.000	0.000
171.	4988.994	-8.580	0.000	3457.172	17.440	0.000	3546.800	-0.000	0.000
172.	4976.360	-7.940	0.000	3475.334	15.950	0.000	3546.800	0.000	0.000
173.	4964.816	-7.200	0.000	3491.603	14.330	0.000	3546.800	-0.000	0.000
174.	4954.499	-6.360	0.000	3506.430	12.580	0.000	3546.800	0.000	0.000
175.	4945.524	-5.470	0.000	3519.676	10.716	0.000	3546.800	-0.000	0.000
176.	4938.004	-4.460	0.000	3529.615	8.720	0.000	3546.800	0.000	0.000
177.	4932.049	-3.420	0.000	3537.937	6.630	0.000	3546.800	-0.000	0.000
178.	4927.731	-2.310	0.000	3543.949	4.478	0.000	3546.800	0.000	0.000
179.	4925.114	-1.170	0.000	3547.584	2.250	0.000	3546.800	0.000	0.000
180.	4924.230	0.000	0.000	3548.000	-0.000	0.000	3546.800	0.000	0.000

BULK

111-PLANE GERMANIUM

	LPMI2	LPMI3	FSRVEL	FSPMI2	FSPMI3	SSRVEL	SSPMI2	SSPMI3
0.	-8.000	0.000	3540.000	-0.000	0.000	2760.030	0.000	-0.000
1.	.090	.430	3540.331	-.070	-.610	2761.294	1.100	-.640
2.	.170	.860	3546.926	-1.730	-1.230	2762.684	2.200	-1.200
3.	.250	1.290	3544.591	-2.590	-1.830	2764.995	3.260	-1.810
4.	.330	1.710	3541.337	-3.430	-2.440	2768.216	4.350	-2.530
5.	.410	2.120	3537.179	-4.270	-3.030	2772.333	5.360	-3.140
6.	.480	2.530	3532.136	-5.080	-3.620	2777.328	6.390	-3.740
7.	.550	2.930	3526.231	-5.870	-4.190	2783.178	7.350	-4.320
8.	.600	3.320	3519.493	-6.630	-4.760	2789.855	8.260	-4.890
9.	.660	3.690	3511.953	-7.370	-5.310	2797.330	9.120	-5.430
10.	.700	4.060	3503.649	-8.070	-5.840	2805.566	9.970	-5.960
11.	.740	4.410	3494.622	-8.740	-6.360	2814.523	10.770	-6.460
12.	.760	4.740	3484.919	-9.360	-6.860	2824.155	11.420	-6.940
13.	.780	5.060	3474.592	-9.930	-7.350	2834.411	12.040	-7.410
14.	.790	5.370	3463.700	-10.450	-7.810	2845.234	12.580	-7.860
15.	.800	5.650	3452.307	-10.910	-8.260	2856.559	13.050	-8.290
16.	.790	5.920	3440.487	-11.310	-8.690	2868.314	13.420	-8.650
17.	.770	6.180	3428.321	-11.620	-9.090	2880.518	13.690	-8.980
18.	.750	6.410	3415.903	-11.850	-9.460	2892.778	13.860	-9.200
19.	.720	6.630	3403.339	-11.970	-9.740	2905.209	13.980	-9.470
20.	.680	6.830	3390.751	-11.960	-10.160	2917.828	13.800	-9.710
21.	.630	7.010	3378.279	-11.840	-10.580	2930.255	13.560	-9.920
22.	.560	7.170	3366.890	-11.530	-10.860	2942.405	13.100	-10.430
23.	.520	7.310	3354.373	-11.030	-11.070	2954.087	12.440	-10.500
24.	.460	7.430	3343.352	-10.280	-11.540	2965.079	11.540	-10.350
25.	.390	7.540	3333.280	-9.260	-11.730	2975.126	10.350	-10.430
26.	.310	7.620	3324.436	-7.970	-11.730	2983.946	8.650	-10.500
27.	.240	7.690	3317.127	-6.350	-11.660	2991.244	7.030	-10.540
28.	.160	7.730	3311.639	-4.440	-11.660	2996.720	4.690	-10.580
29.	.080	7.760	3308.228	-2.290	-12.070	3000.124	2.520	-10.570
30.	-.000	7.770	3307.871	0.000	-12.100	3001.280	0.000	-10.570
31.	-.080	7.760	3311.639	2.290	-12.070	2996.720	-2.520	-10.500
32.	-.160	7.730	3317.127	4.440	-12.000	2991.244	-4.890	-10.540
33.	-.240	7.690	3324.436	6.350	-11.660	2983.946	-7.020	-10.540
34.	-.310	7.620	3333.280	7.970	-11.540	2975.126	-8.650	-10.500
35.	-.390	7.540	3343.352	9.260	-11.320	2965.079	-10.350	-10.430
36.	-.460	7.430	3354.373	10.280	-11.070	2954.087	-12.440	-10.230
37.	-.520	7.310	3366.890	11.030	-10.860	2942.405	-13.100	-10.890
38.	-.560	7.170	3378.279	11.530	-10.580	2930.255	-13.540	-9.920
39.	-.600	6.920	3384.919	11.840	-10.160	2917.828	-13.600	-9.470
40.	-.630	6.630	3390.751	11.960	-9.740	2892.778	-13.860	-9.200
41.	-.660	6.320	3403.339	11.970	-9.460	2880.518	-13.690	-8.980
42.	-.700	6.010	3415.903	11.850	-9.090	2868.314	-13.420	-8.650
43.	-.720	5.690	3428.321	11.620	-8.690	2856.559	-13.050	-8.290
44.	-.750	5.370	3440.487	11.310	-8.260	2845.234	-12.580	-7.860
45.	-.780	5.060	3452.307	10.910	-7.810	2834.411	-12.040	-7.350
46.	-.790	4.740	3463.700	9.930	-7.350	2824.155	-11.420	-6.940
47.	-.760	4.410	3474.592	8.740	-6.860	2814.523	-10.770	-6.460
48.	-.740	4.060	3484.919	8.070	-6.360			
49.	-.740	4.410	3494.622	8.740	-6.360			

111-PLANE GERMANIUM

	LMGVEL	LPM112	LPM113	FSRWEL	FSPM112	FSPM113	SSRWEL	SSPM112	SSPM113
50.	5411.962	-7.70	4.060	3503.649	0.070	-5.440	2805.566	-9.470	-5.460
51.	5418.843	-6.60	3.690	3511.953	7.370	-5.310	2797.330	-9.150	-5.430
52.	5409.803	-6.00	3.320	3519.493	6.630	-4.760	2785.055	-8.280	-4.670
53.	5408.055	-5.50	2.930	3526.231	5.070	-4.190	2783.178	-7.390	-4.320
54.	5408.009	-4.80	2.530	3532.136	5.080	-3.620	2777.328	-6.390	-3.740
55.	5407.275	-4.10	2.120	3537.179	4.270	-3.030	2772.334	-5.340	-3.140
56.	5406.662	-3.30	1.710	3541.337	3.430	-2.440	2768.217	-4.350	-2.530
57.	5406.176	-2.50	1.290	3544.591	2.590	-1.850	2764.995	-3.280	-1.710
58.	5405.828	-1.70	0.860	3546.926	1.730	-1.230	2762.694	-2.280	-1.280
59.	5405.617	-0.90	0.430	3548.331	0.870	-0.610	2761.294	-1.180	-0.640
60.	5405.546	0.000	0.000	3548.800	-0.000	0.000	2760.830	-0.000	-0.000
61.	5405.617	0.040	-0.430	3548.331	-0.070	-0.610	2761.294	1.100	-0.640
62.	5405.828	0.170	-0.860	3546.926	-1.730	1.230	2762.694	2.280	1.280
63.	5406.176	0.250	-1.290	3544.591	-2.590	1.850	2764.995	3.280	1.910
64.	5406.663	0.330	-1.710	3541.337	-3.430	2.440	2768.216	4.350	2.530
65.	5407.275	0.410	-2.120	3537.179	-4.270	3.030	2772.333	5.340	3.140
66.	5408.009	0.480	-2.530	3532.136	-5.080	3.620	2777.328	6.390	3.740
67.	5408.055	0.550	-2.930	3526.231	-5.070	4.190	2783.178	7.390	4.320
68.	5409.803	0.600	-3.320	3519.493	-6.630	4.760	2785.055	8.280	4.670
69.	5411.962	0.660	-3.690	3511.953	-7.370	5.310	2797.330	9.150	5.430
70.	5413.140	0.700	-4.060	3503.649	-8.070	5.640	2805.566	9.970	5.960
71.	5414.386	0.740	-4.410	3494.622	-8.740	6.360	2814.523	10.720	6.460
72.	5415.664	0.760	-4.740	3484.919	-9.360	6.660	2824.155	11.420	6.940
73.	5416.966	0.790	-5.060	3474.592	-9.930	7.350	2834.411	12.040	7.370
74.	5418.276	0.800	-5.370	3463.700	-10.450	7.610	2844.234	12.560	7.610
75.	5419.587	0.800	-5.650	3452.307	-10.910	8.250	2854.599	13.050	8.200
76.	5420.876	0.750	-5.920	3440.486	-11.310	8.630	2864.314	13.420	8.570
77.	5422.134	0.700	-6.180	3428.321	-11.620	9.050	2880.418	13.690	8.900
78.	5423.345	0.720	-6.410	3415.903	-11.850	9.440	2892.778	13.660	9.240
79.	5424.496	0.680	-6.630	3403.339	-11.970	9.440	2905.268	13.540	9.470
80.	5425.581	0.660	-6.830	3390.750	-11.940	10.160	2917.828	13.800	9.710
81.	5426.581	0.630	-7.010	3378.279	-11.840	10.580	2930.235	13.540	9.920
82.	5427.485	0.580	-7.170	3366.090	-11.530	10.600	2942.485	13.100	10.050
83.	5428.296	0.520	-7.310	3354.373	-11.030	11.070	2954.087	12.440	10.230
84.	5429.093	0.460	-7.430	3343.352	-10.290	11.320	2965.078	11.540	10.350
85.	5429.893	0.390	-7.540	3333.279	-9.280	11.540	2975.126	10.350	10.430
86.	5430.573	0.310	-7.620	3324.436	-8.190	11.730	2983.948	9.650	10.500
87.	5431.230	0.240	-7.690	3317.126	-6.930	11.880	2991.283	8.650	10.540
88.	5431.860	0.160	-7.730	3311.639	-5.440	12.000	2996.728	7.030	10.580
89.	5432.559	0.080	-7.760	3308.228	-4.290	12.070	3000.124	5.820	10.570
90.	5433.226	-0.000	-7.770	3307.071	0.000	12.100	3003.124	0.000	10.570
91.	5433.859	-0.060	-7.760	3306.224	2.290	12.070	3005.124	-2.520	10.570
92.	5434.460	-0.160	-7.730	3311.639	4.440	12.000	2998.728	-4.650	10.540
93.	5435.030	-0.240	-7.690	3317.126	6.350	11.880	2991.283	-7.030	10.580
94.	5435.573	-0.310	-7.620	3324.436	7.970	11.730	2983.948	-8.650	10.500
95.	5436.093	-0.390	-7.540	3333.279	9.280	11.540	2975.126	-10.350	10.430
96.	5436.586	-0.460	-7.430	3343.352	10.290	11.320	2965.078	-11.540	10.350
97.	5437.049	-0.520	-7.310	3354.373	11.030	11.070	2954.087	-12.440	10.230
98.	5437.489	-0.580	-7.170	3366.090	11.530	10.600	2942.485	-13.100	10.050
99.	5437.881	-0.630	-7.010	3378.279	11.840	10.580	2930.235	-13.540	9.920

111-PLANE GERMANIUM

BULK

	LMGVEL	LPN12	LPN13	FSRVEL	FSPN12	FSPN13	SSRVEL	SSPN12	SSPN13
180.	5424.496	-.660	-6.830	3390.750	11.960	10.180	2517.626	-13.680	5.710
181.	5423.345	-.720	-6.630	3403.339	11.970	9.840	2905.288	-13.900	9.470
182.	5422.134	-.750	-6.410	3415.983	11.850	9.460	2692.778	-13.660	9.240
183.	5420.876	-.770	-6.180	3428.321	11.620	9.090	2488.418	-13.690	8.900
184.	5419.587	-.790	-5.920	3440.486	11.310	8.690	2286.314	-13.420	8.570
185.	5418.278	-.800	-5.650	3452.307	10.910	8.260	2086.559	-13.650	8.200
186.	5416.966	-.790	-5.370	3463.700	10.450	7.810	2045.234	-12.500	7.810
187.	5415.664	-.780	-5.060	3474.592	9.930	7.350	2834.411	-12.040	7.350
188.	5414.386	-.760	-4.740	3484.919	9.360	6.860	2824.155	-11.420	6.860
189.	5413.146	-.740	-4.410	3494.622	8.740	6.360	2614.523	-10.720	6.360
190.	5411.962	-.700	-4.060	3503.649	8.070	5.840	2605.566	-9.570	5.840
191.	5410.843	-.660	-3.690	3511.953	7.370	5.310	2797.330	-9.150	5.310
192.	5409.803	-.680	-3.320	3519.493	6.630	4.760	2783.178	-8.280	4.760
193.	5408.855	-.550	-2.930	3526.231	5.870	4.150	2772.328	-7.350	4.150
194.	5408.009	-.460	-2.530	3532.136	5.060	3.620	2777.328	-6.390	3.620
195.	5407.275	-.410	-2.120	3537.179	4.270	3.030	2772.328	-5.340	3.030
196.	5406.663	-.330	-1.710	3541.337	3.430	2.440	2768.216	-4.300	2.440
197.	5406.176	-.250	-1.298	3544.591	2.590	1.830	2764.995	-3.260	1.830
198.	5405.828	-.170	-.868	3546.926	1.730	1.230	2762.684	-2.200	1.230
199.	5405.617	-.090	-.430	3548.331	.870	.610	2761.294	-1.100	.610
200.	5405.546	-.000	0.000	3548.800	0.000	0.000	2760.830	0.000	0.000
201.	5405.617	.090	.430	3548.331	-.870	-.610	2761.294	1.100	-.610
202.	5405.828	.170	.868	3546.926	-1.730	-1.230	2762.684	2.200	-1.230
203.	5406.176	.250	1.298	3544.591	-2.590	-1.830	2764.995	3.260	-1.830
204.	5406.662	.330	1.710	3541.337	-3.430	-2.440	2768.216	4.300	-2.440
205.	5407.275	.410	2.120	3537.179	-4.270	-3.030	2772.328	5.340	-3.030
206.	5408.009	.460	2.530	3532.136	-5.060	-3.620	2777.328	6.390	-3.620
207.	5408.855	.550	2.930	3526.231	-5.870	-4.150	2783.178	7.350	-4.150
208.	5409.803	.600	3.320	3519.493	-6.630	-4.760	2789.959	8.280	-4.760
209.	5410.843	.660	3.690	3511.953	-7.370	-5.310	2797.330	9.150	-5.310
210.	5411.962	.700	4.060	3503.649	-8.070	-5.840	2805.566	9.970	-5.840
211.	5413.146	.740	4.410	3494.622	-8.740	-6.360	2814.523	10.720	-6.360
212.	5414.386	.760	4.740	3484.919	-9.360	-6.860	2824.155	11.420	-6.860
213.	5415.664	.780	5.060	3474.592	-9.930	-7.350	2834.411	12.040	-7.350
214.	5416.966	.790	5.370	3463.700	-10.450	-7.810	2845.234	12.500	-7.810
215.	5418.278	.800	5.650	3452.307	-10.910	-8.260	2856.559	13.050	-8.260
216.	5419.586	.790	5.920	3440.487	-11.310	-8.690	2868.314	13.420	-8.690
217.	5420.876	.770	6.180	3428.321	-11.620	-9.090	2880.416	13.690	-9.090
218.	5422.134	.750	6.410	3415.983	-11.850	-9.460	2892.778	13.900	-9.460
219.	5423.345	.720	6.630	3403.339	-11.970	-9.840	2905.288	14.090	-9.840
220.	5424.496	.680	6.830	3390.750	-12.040	-10.180	2917.626	14.200	-10.180
221.	5425.581	.630	7.010	3378.279	-12.040	-10.180	2929.255	14.200	-10.180
222.	5426.581	.580	7.170	3366.050	-11.530	-10.800	2940.805	14.100	-10.800
223.	5427.489	.520	7.310	3354.373	-11.020	-11.470	2951.807	13.900	-11.470
224.	5428.296	.460	7.430	3343.352	-10.500	-12.100	2962.405	13.600	-12.100
225.	5428.993	.390	7.540	3333.230	-9.930	-12.740	2972.607	13.200	-12.740
226.	5429.573	.310	7.620	3324.436	-9.280	-13.330	2982.405	12.700	-13.330
227.	5430.030	.240	7.690	3317.127	-8.570	-13.870	2991.807	12.100	-13.870
228.	5430.360	.160	7.730	3311.639	-7.810	-14.440	2999.807	11.500	-14.440
229.	5430.559	.080	7.760	3308.226	-7.010	-15.000	3006.405	10.800	-15.000

111-PLANE GERMANIUM					
	LNQVEL	LPNI12	LPNI13	FSRVEL	FSPHI12
150.	5438.626	0.000	7.770	3307.071	-0.000
151.	5438.559	-0.060	7.768	3308.228	2.290
152.	5438.350	-0.160	7.730	3311.639	4.440
153.	5430.830	-0.240	7.690	3317.127	6.350
154.	5429.573	-0.310	7.620	3324.488	7.970
155.	5428.993	-0.390	7.540	3333.280	9.280
156.	5428.296	-0.460	7.430	3343.352	10.290
157.	5427.489	-0.520	7.310	3354.373	11.030
158.	5426.581	-0.560	7.170	3366.830	11.530
159.	5425.581	-0.630	7.010	3378.279	11.840
160.	5424.498	-0.680	6.830	3390.751	11.980
161.	5423.345	-0.720	6.630	3403.339	11.970
162.	5422.134	-0.750	6.410	3415.903	11.850
163.	5420.876	-0.778	6.180	3428.321	11.620
164.	5419.586	-0.790	5.920	3440.487	11.310
165.	5418.278	-0.800	5.650	3452.387	10.910
166.	5416.966	-0.790	5.370	3463.700	10.450
167.	5415.664	-0.768	5.060	3474.592	9.930
168.	5414.386	-0.740	4.740	3484.919	9.360
169.	5413.148	-0.700	4.410	3494.622	8.740
170.	5411.962	-0.660	4.060	3503.649	8.070
171.	5410.843	-0.600	3.690	3511.953	7.370
172.	5409.803	-0.550	3.320	3519.493	6.630
173.	5408.855	-0.480	2.930	3526.231	5.870
174.	5408.009	-0.410	2.530	3532.136	5.080
175.	5407.275	-0.330	2.120	3537.179	4.270
176.	5406.663	-0.250	1.710	3541.337	3.430
177.	5406.178	-0.170	1.290	3544.591	2.590
178.	5405.828	-0.090	.860	3546.926	1.730
179.	5405.617	0.000	.430	3548.331	.870
180.	5405.546		-0.000	3548.800	-0.000

BULK

	FSPHI13	SSRVEL	SSPHI12	SSPHI13
	-12.100	3081.280	-0.000	-10.570
	-12.070	3080.124	-2.520	-14.570
	-12.000	2996.720	-4.690	-10.560
	-11.880	2991.244	-7.830	-10.540
	-11.730	2983.946	-8.650	-10.500
	-11.540	2975.126	-10.350	-10.430
	-11.320	2965.079	-11.540	-10.350
	-11.070	2954.087	-12.440	-10.230
	-10.800	2942.405	-13.100	-10.090
	-10.500	2930.255	-13.540	-9.920
	-10.180	2917.828	-13.680	-9.710
	-9.840	2905.289	-13.900	-9.470
	-9.480	2892.778	-13.660	-9.200
	-9.090	2880.316	-13.690	-8.900
	-8.690	2868.314	-13.420	-8.570
	-8.260	2856.559	-13.050	-8.200
	-7.810	2845.234	-12.500	-7.810
	-7.350	2834.411	-12.040	-7.350
	-6.860	2824.155	-11.420	-6.940
	-6.360	2814.523	-10.720	-6.460
	-5.840	2805.566	-9.970	-5.960
	-5.310	2797.330	-9.150	-5.430
	-4.760	2789.855	-8.260	-4.890
	-4.190	2783.178	-7.350	-4.320
	-3.620	2777.328	-6.390	-3.740
	-3.030	2772.333	-5.360	-3.140
	-2.440	2768.216	-4.350	-2.530
	-1.830	2764.995	-3.260	-1.910
	-1.230	2762.684	-2.200	-1.260
	-.610	2761.294	-1.100	-.640
	0.000	2760.830	0.000	0.000

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	LNQVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	5556.725	0.000	0.000	3046.224	14.180	0.000	3046.214	-14.170	0.000
1.	5556.415	-0.370	-0.000	3059.692	14.210	0.000	3033.253	-13.290	0.000
2.	5555.475	-0.740	-0.000	3073.260	14.230	0.000	3021.235	-12.330	0.000
3.	5553.892	-1.130	-0.000	3086.898	14.240	0.000	3010.222	-11.300	0.000
4.	5551.654	-1.520	-0.000	3100.591	14.220	0.000	3000.261	-10.200	0.000
5.	5548.751	-1.910	-0.000	3114.320	14.190	0.000	2991.398	-9.030	0.000
6.	5545.176	-2.320	-0.000	3128.068	14.140	0.000	2983.672	-7.610	0.000
7.	5540.921	-2.720	-0.000	3141.819	14.070	0.000	2977.121	-6.543	0.000
8.	5535.982	-3.130	-0.000	3155.556	13.990	0.000	2971.777	-5.210	0.000
9.	5530.355	-3.540	0.000	3169.262	13.900	0.000	2967.665	-3.850	0.000
10.	5524.039	-3.950	0.000	3182.922	13.790	0.000	2964.809	-2.460	0.000
11.	5517.033	-4.370	-0.000	3196.518	13.660	0.000	2963.227	-1.040	-0.000
12.	5509.338	-4.760	-0.000	3210.037	13.520	0.000	2962.929	.390	0.000
13.	5500.956	-5.190	-0.000	3223.461	13.370	0.000	2963.925	1.823	0.000
14.	5491.897	-5.600	-0.000	3236.777	13.210	0.000	2966.216	3.250	0.000
15.	5482.161	-6.010	-0.000	3249.969	13.030	0.000	2969.799	4.660	0.000
16.	5471.759	-6.410	-0.000	3263.023	12.840	0.000	2974.664	6.050	0.000
17.	5460.780	-6.810	-0.000	3275.924	12.640	0.000	2980.800	7.410	-0.000
18.	5448.995	-7.210	-0.000	3288.660	12.430	0.000	2988.187	8.730	-0.000
19.	5436.659	-7.550	0.000	3301.215	12.200	0.000	2996.800	9.990	-0.000
20.	5423.705	-7.970	0.000	3313.578	11.970	0.000	3006.611	11.210	-0.000
21.	5410.152	-8.340	0.000	3325.736	11.730	0.000	3017.586	12.360	0.000
22.	5396.019	-8.700	0.000	3337.675	11.480	0.000	3029.685	13.450	0.000
23.	5381.328	-9.050	-0.000	3349.384	11.210	0.000	3042.865	14.470	0.000
24.	5366.101	-9.350	0.000	3360.851	10.940	0.000	3057.078	15.420	-0.000
25.	5350.367	-9.710	-0.000	3372.065	10.660	0.000	3072.270	16.280	0.000
26.	5334.153	-10.020	-0.000	3383.014	10.380	0.000	3088.385	17.070	-0.000
27.	5317.492	-10.300	0.000	3393.687	10.080	0.000	3105.359	17.780	0.000
28.	5300.418	-10.570	0.000	3404.076	9.780	0.000	3123.128	18.410	0.000
29.	5282.969	-10.820	0.000	3414.168	9.470	0.000	3141.621	18.950	0.000
30.	5265.187	-11.040	-0.000	3423.955	9.160	0.000	3160.763	19.410	0.000
31.	5247.117	-11.240	0.000	3433.428	8.830	0.000	3180.475	19.790	-0.000
32.	5228.806	-11.410	0.000	3442.578	8.500	0.000	3200.674	20.070	0.000
33.	5210.313	-11.540	-0.000	3451.395	8.170	0.000	3221.273	20.270	0.000
34.	5191.689	-11.640	0.000	3459.873	7.830	0.000	3242.161	20.390	-0.000
35.	5173.000	-11.700	-0.000	3468.082	7.490	0.000	3263.300	20.410	-0.000
36.	5154.312	-11.720	0.000	3475.776	7.140	0.000	3284.530	20.340	-0.000
37.	5135.698	-11.690	0.000	3483.188	6.780	0.000	3305.767	20.180	0.000
38.	5117.238	-11.610	0.000	3490.231	6.420	0.000	3326.899	19.920	0.000
39.	5099.014	-11.480	-0.000	3496.898	6.060	0.000	3347.812	19.560	0.000
40.	5081.118	-11.290	0.000	3503.184	5.690	0.000	3368.367	19.110	-0.000
41.	5063.645	-11.030	0.000	3509.083	5.320	0.000	3388.499	18.540	0.000
42.	5046.697	-10.700	0.000	3514.590	4.950	0.000	3408.020	17.670	-0.000
43.	5030.380	-10.310	0.000	3519.700	4.574	0.000	3426.816	17.098	0.000
44.	5014.806	-9.830	0.000	3524.404	4.190	0.000	3444.758	16.208	0.000
45.	5000.090	-9.270	0.000	3528.711	3.810	0.000	3461.703	15.190	-0.000
46.	4986.350	-8.630	0.000	3532.605	3.420	0.000	3477.515	14.060	0.000
47.	4973.704	-7.910	0.000	3536.085	3.040	0.000	3492.057	12.610	0.000
48.	4962.268	-7.100	0.000	3539.150	2.650	0.000	3505.197	11.458	0.000
49.	4952.155	-6.220	0.000	3541.796	2.260	0.000	3516.807	9.980	-0.000

BULK

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BULK

	LNVEL	LPMI12	LPMI13	FSRVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13
50.	4943.470	-5.260	0.000	3544.022	1.470	0.000	3526.769	8.410	0.000
51.	4936.310	-4.230	0.000	3545.425	1.470	0.000	3534.976	6.750	-0.000
52.	4930.756	-3.140	0.000	3547.284	1.000	0.000	3541.339	5.010	0.000
53.	4926.874	-2.820	0.000	3548.158	.690	0.000	3545.783	3.210	0.000
54.	4924.713	-0.860	0.000	3548.685	.290	0.000	3548.257	1.370	-0.000
55.	4924.299	.310	0.000	3548.786	-1.100	0.000	3548.731	-4.900	-0.000
56.	4925.630	1.470	0.000	3548.460	-5.000	0.000	3547.194	-2.340	-0.000
57.	4928.712	2.620	0.000	3547.707	-8.900	0.000	3543.679	-4.160	-0.000
58.	4933.484	3.720	0.000	3546.529	-1.290	0.000	3538.214	-6.530	0.000
59.	4939.895	4.780	0.000	3544.926	-1.660	0.000	3538.687	-7.640	0.000
60.	4947.872	5.770	0.000	3542.899	-2.070	0.000	3521.721	-9.250	-0.000
61.	4957.323	6.690	0.000	3540.431	-2.460	0.000	3510.875	-10.770	-0.000
62.	4968.148	7.540	0.000	3537.584	-2.850	0.000	3498.442	-12.150	0.000
63.	4980.237	8.300	0.000	3534.294	-3.240	0.000	3484.545	-13.490	-0.000
64.	4993.476	8.980	0.000	3530.600	-3.630	0.000	3469.316	-14.670	-0.000
65.	5007.746	9.580	0.000	3526.490	-4.016	0.000	3452.889	-15.740	-0.000
66.	5022.929	10.090	0.000	3521.973	-4.390	0.000	3435.401	-16.690	-0.000
67.	5038.910	10.530	0.000	3517.052	-4.770	0.000	3416.931	-17.520	-0.000
68.	5055.573	10.890	0.000	3511.732	-5.140	0.000	3397.794	-18.240	-0.000
69.	5072.812	11.170	0.000	3506.017	-5.520	0.000	3377.945	-18.850	0.000
70.	5090.521	11.400	0.000	3499.913	-5.890	0.000	3357.573	-19.360	-0.000
71.	5108.601	11.560	0.000	3493.425	-6.250	0.000	3336.804	-19.760	-0.000
72.	5126.961	11.660	0.000	3486.555	-6.610	0.000	3315.761	-20.070	-0.000
73.	5145.512	11.710	-0.000	3479.320	-6.976	0.000	3294.560	-20.260	-0.000
74.	5164.174	11.720	0.000	3471.716	-7.320	0.000	3273.313	-20.390	0.000
75.	5182.872	11.670	0.000	3463.754	-7.670	0.000	3252.128	-20.410	-0.000
76.	5201.535	11.590	0.000	3455.439	-8.010	0.000	3231.109	-20.340	-0.000
77.	5220.090	11.478	0.000	3446.791	-8.350	0.000	3210.353	-20.180	-0.000
78.	5238.502	11.320	0.000	3437.788	-8.680	0.000	3189.353	-19.930	0.000
79.	5256.691	11.140	0.000	3428.466	-9.000	0.000	3170.001	-19.600	-0.000
80.	5274.615	10.930	0.000	3418.826	-9.320	0.000	3150.500	-19.160	-0.000
81.	5292.226	10.690	0.000	3408.877	-9.640	0.000	3131.771	-18.660	0.000
82.	5309.402	10.430	-0.000	3398.627	-9.940	0.000	3113.652	-18.090	-0.000
83.	5326.343	10.150	0.000	3388.087	-10.240	0.000	3096.294	-17.420	0.000
84.	5342.772	9.860	0.000	3377.256	-10.530	0.000	3079.765	-16.670	-0.000
85.	5358.736	9.540	0.000	3366.176	-10.810	0.000	3064.130	-15.830	0.000
86.	5374.206	9.210	0.000	3354.827	-11.090	0.000	3049.448	-14.930	0.000
87.	5389.153	8.870	0.000	3343.231	-11.350	0.000	3035.774	-13.940	-0.000
88.	5403.553	8.510	-0.000	3331.399	-11.610	0.000	3023.159	-12.990	-0.000
89.	5417.342	8.150	-0.000	3319.343	-11.860	0.000	3011.648	-11.760	-0.000
90.	5430.621	7.770	-0.000	3307.076	-12.100	0.000	3001.293	-10.570	-0.000
91.	5443.250	7.390	0.000	3294.609	-12.320	0.000	2992.111	-9.330	-0.000
92.	5455.255	7.000	0.000	3281.957	-12.540	0.000	2984.132	-8.040	-0.000
93.	5466.620	6.600	0.000	3269.132	-12.750	0.000	2977.403	-6.700	0.000
94.	5477.334	6.200	0.000	3256.148	-12.940	0.000	2971.936	-5.320	-0.000
95.	5487.305	5.790	0.000	3243.020	-13.120	0.000	2967.746	-3.920	-0.000
96.	5496.765	5.380	-0.000	3229.761	-13.290	0.000	2964.445	-2.490	-0.000
97.	5505.468	4.978	0.000	3216.386	-13.450	0.000	2963.238	-1.060	-0.000
98.	5513.486	4.560	0.000	3202.910	-13.600	0.000	2962.924	.370	-0.000
99.	5520.810	4.150	0.000	3189.348	-13.750	0.000	2963.903	1.790	-0.000

110-PLANE GERMANIUM										BULK		
	LPH12	LPH13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13				
100.	5527.460	3.730	3175.716	-13.050	0.000	2966.159	3.200	-0.000				
101.	5533.412	3.320	3162.030	-13.950	0.000	2969.681	4.570	-0.000				
102.	5538.676	2.910	3148.306	-14.040	0.000	2974.447	5.920	-0.000				
103.	5543.253	2.510	3134.560	-14.110	0.000	2980.432	7.220	-0.000				
104.	5547.146	2.100	3120.806	-14.170	0.000	2987.607	8.460	-0.000				
105.	5550.367	1.700	3107.068	-14.210	0.000	2995.938	9.660	-0.000				
106.	5552.918	1.310	3093.356	-14.230	0.000	3005.366	10.790	-0.000				
107.	5554.809	.920	3079.689	-14.240	0.000	3015.908	11.650	-0.000				
108.	5556.051	.540	3066.086	-14.240	0.000	3027.459	12.640	-0.000				
109.	5556.656	.170	3052.563	-14.230	0.000	3039.947	13.770	-0.000				
110.	5556.644	-.190	3039.139	-14.150	-0.000	3053.438	14.610	-0.000				
111.	5556.016	-.540	3025.830	-14.080	-0.000	3067.756	15.360	-0.000				
112.	5554.804	-.690	3012.655	-13.990	-0.000	3082.681	16.060	-0.000				
113.	5553.022	-1.220	2999.632	-13.860	-0.000	3098.749	16.690	-0.000				
114.	5550.692	-1.540	2986.778	-13.760	-0.000	3115.294	17.230	-0.000				
115.	5547.837	-1.840	2974.113	-13.610	-0.000	3132.450	17.690	-0.000				
116.	5544.483	-2.130	2961.652	-13.440	-0.000	3150.146	18.070	-0.000				
117.	5540.655	-2.400	2949.415	-13.250	-0.000	3168.309	18.360	-0.000				
118.	5536.384	-2.660	2937.420	-13.040	-0.000	3186.665	18.610	-0.000				
119.	5531.700	-2.890	2925.603	-12.800	-0.000	3205.739	18.760	-0.000				
120.	5526.637	-3.110	2914.223	-12.540	-0.000	3224.653	18.840	-0.000				
121.	5521.230	-3.310	2903.056	-12.260	-0.000	3244.126	18.850	-0.000				
122.	5515.517	-3.480	2892.201	-11.960	-0.000	3263.485	18.760	-0.000				
123.	5509.537	-3.630	2881.673	-11.640	-0.000	3282.843	18.640	-0.000				
124.	5503.330	-3.760	2871.469	-11.290	-0.000	3302.120	18.430	-0.000				
125.	5496.942	-3.850	2861.665	-10.920	-0.000	3321.233	18.150	-0.000				
126.	5490.417	-3.930	2852.217	-10.530	-0.000	3340.100	17.800	-0.000				
127.	5483.802	-3.970	2843.161	-10.120	-0.000	3358.636	17.360	-0.000				
128.	5477.146	-3.990	2834.511	-9.680	-0.000	3376.759	16.860	-0.000				
129.	5470.500	-3.970	2826.282	-9.230	-0.000	3394.366	16.320	-0.000				
130.	5463.913	-3.920	2818.466	-8.750	-0.000	3411.434	15.700	-0.000				
131.	5457.436	-3.840	2811.139	-8.260	-0.000	3427.821	15.000	-0.000				
132.	5451.128	-3.730	2804.251	-7.740	-0.000	3443.468	14.240	-0.000				
133.	5445.035	-3.590	2797.634	-7.210	-0.000	3458.295	13.410	-0.000				
134.	5439.211	-3.420	2791.991	-6.660	-0.000	3472.227	12.520	-0.000				
135.	5433.706	-3.220	2786.461	-6.090	-0.000	3485.190	11.570	-0.000				
136.	5428.573	-2.960	2781.523	-5.510	-0.000	3497.115	10.560	-0.000				
137.	5423.856	-2.720	2777.097	-4.910	-0.000	3507.935	9.500	-0.000				
138.	5419.600	-2.430	2773.190	-4.310	-0.000	3517.591	8.390	-0.000				
139.	5415.846	-2.110	2769.409	-3.690	-0.000	3526.026	7.230	-0.000				
140.	5412.631	-1.760	2766.961	-3.060	-0.000	3533.192	6.030	-0.000				
141.	5409.967	-1.430	2764.650	-2.420	-0.000	3539.045	4.800	-0.000				
142.	5407.941	-1.060	2762.861	-1.760	-0.000	3543.551	3.540	-0.000				
143.	5406.514	-.660	2761.656	-1.130	-0.000	3546.682	2.250	-0.000				
144.	5405.720	-.290	2760.978	-.460	-0.000	3548.419	.560	-0.000				
145.	5405.566	.100	2760.844	.170	-0.000	3548.751	-.340	-0.000				
146.	5406.060	.490	2761.268	.820	-0.000	3547.677	-1.640	-0.000				
147.	5407.169	.880	2762.234	1.470	-0.000	3545.202	-2.530	-0.000				
148.	5408.945	1.250	2763.747	2.120	-0.000	3541.342	-4.210	-0.000				
149.	5411.310	1.610	2765.803	2.760	-0.000	3536.120	-5.450	-0.000				

110-PLANE GERMANIUM									
	LMVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
150.	5414.859	1.960	0.000	2768.398	3.390	0.000	3529.569	-6.670	-0.000
151.	5417.763	2.280	0.000	2771.526	4.020	0.000	3521.726	-7.650	-0.000
152.	5421.787	2.560	0.000	2775.188	4.630	0.000	3512.641	-8.500	-0.000
153.	5426.292	2.860	0.000	2779.370	5.230	0.000	3502.363	-10.070	-0.000
154.	5431.235	3.110	0.000	2784.067	5.820	0.000	3490.952	-11.100	-0.000
155.	5436.571	3.330	0.000	2789.271	6.390	0.000	3478.470	-12.000	-0.000
156.	5442.250	3.510	0.000	2794.973	6.950	0.000	3464.987	-13.000	-0.000
157.	5448.222	3.670	0.000	2801.163	7.490	-0.000	3450.573	-13.660	0.000
158.	5454.436	3.800	0.000	2807.829	8.020	0.000	3435.304	-14.650	-0.000
159.	5460.840	3.900	0.000	2814.962	8.520	0.000	3419.256	-15.300	-0.000
160.	5467.380	3.950	0.000	2822.547	9.010	0.000	3402.510	-16.040	-0.000
161.	5474.005	3.960	0.000	2830.574	9.470	0.000	3385.146	-16.630	-0.000
162.	5480.663	3.960	0.000	2839.027	9.920	0.000	3367.247	-17.130	0.000
163.	5487.303	3.950	0.000	2847.893	10.340	0.000	3348.895	-17.610	0.000
164.	5493.877	3.900	0.000	2857.158	10.740	0.000	3330.174	-17.990	0.000
165.	5500.335	3.810	0.000	2866.806	11.120	0.000	3311.167	-18.310	0.000
166.	5506.633	3.690	0.000	2876.822	11.480	0.000	3291.957	-18.550	0.000
167.	5512.725	3.550	0.000	2887.190	11.810	0.000	3272.627	-18.730	0.000
168.	5518.570	3.390	0.000	2897.893	12.120	0.000	3253.260	-18.830	0.000
169.	5524.126	3.210	0.000	2908.915	12.410	0.000	3233.935	-18.860	0.000
170.	5529.356	3.000	0.000	2920.236	12.660	0.000	3214.735	-18.810	0.000
171.	5534.223	2.770	0.000	2931.847	12.930	0.000	3195.738	-18.650	0.000
172.	5538.693	2.520	-0.000	2943.722	13.150	-0.000	3177.023	-18.500	0.000
173.	5542.733	2.260	-0.000	2955.848	13.350	0.000	3158.665	-18.230	0.000
174.	5546.315	1.960	-0.000	2968.205	13.530	0.000	3140.740	-17.860	-0.000
175.	5549.409	1.680	0.000	2980.776	13.690	-0.000	3123.320	-17.460	0.000
176.	5551.969	1.370	-0.000	2993.543	13.830	0.000	3106.478	-16.960	-0.000
177.	5554.033	1.040	0.000	3006.466	13.940	0.000	3090.282	-16.380	0.000
178.	5555.516	.710	-0.000	3019.594	14.040	0.000	3074.798	-15.720	-0.000
179.	5556.420	.360	0.000	3032.841	14.120	-0.000	3060.092	-14.950	-0.000
180.	5556.725	0.000	-0.000	3046.214	14.170	-0.000	3046.224	-14.100	-0.000

BULK

7-PLANE (XY-PLANE) INDIUM ANTIMONIDE

BULK

	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
0.	3412.645	0.100	0.000	2287.781	0.000	0.000	2287.787	0.000	0.000
1.	3413.338	1.250	0.000	2287.789	0.000	0.000	2286.819	-2.770	0.000
2.	3415.275	2.470	0.000	2287.793	0.000	0.000	2283.925	-5.150	0.000
3.	3416.472	3.660	0.000	2287.802	0.000	0.000	2279.137	-6.150	0.000
4.	3422.867	4.790	0.000	2287.813	0.000	0.000	2272.502	-10.760	0.000
5.	3428.459	5.850	0.000	2287.828	0.000	0.000	2264.087	-13.210	0.000
6.	3435.110	6.820	0.000	2287.845	0.000	0.000	2253.372	-15.530	0.000
7.	3442.772	7.710	0.000	2287.866	0.000	0.000	2242.252	-17.100	0.000
8.	3451.355	8.560	0.000	2287.885	0.000	0.000	2229.027	-18.710	0.000
9.	3460.873	9.150	0.000	2287.916	0.000	0.000	2214.408	-21.570	0.000
10.	3470.876	9.750	0.000	2287.945	0.000	0.000	2193.507	-23.820	0.000
11.	3481.627	10.250	0.000	2287.970	0.000	0.000	2181.442	-24.620	0.000
12.	3492.913	10.700	0.000	2288.010	0.000	0.000	2163.329	-26.220	0.000
13.	3504.827	11.020	0.000	2288.046	0.000	0.000	2144.295	-27.490	0.000
14.	3516.708	11.250	0.000	2288.084	0.000	0.000	2124.426	-28.620	0.000
15.	3529.047	11.420	0.000	2288.124	0.000	0.000	2103.863	-29.620	0.000
16.	3541.573	11.520	0.000	2288.166	0.000	0.000	2081.700	-30.500	0.000
17.	3554.210	11.540	0.000	2288.205	0.000	0.000	2061.070	-31.270	0.000
18.	3566.886	11.510	0.000	2288.253	0.000	0.000	2033.053	-31.920	0.000
19.	3579.531	11.420	0.000	2288.296	0.000	0.000	2016.780	-32.470	0.000
20.	3592.105	11.280	0.000	2288.344	0.000	0.000	1994.251	-32.910	0.000
21.	3604.531	11.100	0.000	2288.391	0.000	0.000	1971.743	-33.240	0.000
22.	3616.745	10.870	0.000	2288.438	0.000	0.000	1949.212	-33.470	0.000
23.	3628.759	10.610	0.000	2288.485	0.000	0.000	1926.752	-33.550	0.000
24.	3640.469	10.310	0.000	2288.532	0.000	0.000	1904.573	-33.600	0.000
25.	3651.856	9.940	0.000	2288.579	0.000	0.000	1882.847	-33.500	0.000
26.	3662.854	9.620	0.000	2288.625	0.000	0.000	1861.101	-33.290	0.000
27.	3673.518	9.240	0.000	2288.670	0.000	0.000	1834.251	-32.910	0.000
28.	3683.729	8.830	0.000	2288.714	0.000	0.000	1807.473	-32.470	0.000
29.	3693.467	8.400	0.000	2288.757	0.000	0.000	1781.047	-31.920	0.000
30.	3702.766	7.960	0.000	2288.799	0.000	0.000	1755.033	-31.270	0.000
31.	3711.540	7.500	0.000	2288.839	0.000	0.000	1729.529	-30.500	0.000
32.	3719.807	7.020	0.000	2288.877	0.000	0.000	1704.550	-29.620	0.000
33.	3727.524	6.530	0.000	2288.913	0.000	0.000	1679.359	-28.620	0.000
34.	3734.637	6.020	0.000	2288.947	0.000	0.000	1654.040	-27.490	0.000
35.	3741.289	5.510	0.000	2288.976	0.000	0.000	1628.640	-26.220	0.000
36.	3747.288	4.980	0.000	2289.007	0.000	0.000	1603.134	-24.820	0.000
37.	3752.666	4.440	0.000	2289.033	0.000	0.000	1577.566	-23.320	0.000
38.	3757.454	3.910	0.000	2289.057	0.000	0.000	1551.913	-21.760	0.000
39.	3761.622	3.380	0.000	2289.078	0.000	0.000	1526.170	-20.000	0.000
40.	3765.162	2.810	0.000	2289.094	0.000	0.000	1500.340	-18.120	0.000
41.	3768.086	2.250	0.000	2289.110	0.000	0.000	1474.420	-16.020	0.000
42.	3770.333	1.650	0.000	2289.121	0.000	0.000	1448.420	-13.760	0.000
43.	3771.954	1.130	0.000	2289.129	0.000	0.000	1422.340	-11.260	0.000
44.	3772.926	.570	0.000	2289.134	0.000	0.000	1396.190	-8.500	0.000
45.	3773.253	0.000	0.000	2289.136	0.000	0.000	1369.970	-5.440	0.000
46.	3772.926	-0.510	0.000	2289.134	-0.000	0.000	1343.690	-2.000	0.000
47.	3771.954	-1.130	0.000	2289.129	-0.000	0.000	1317.330	1.440	0.000
48.	3770.333	-1.650	0.000	2289.121	-0.000	0.000	1290.880	3.840	0.000
49.	3768.086	-2.250	0.000	2289.110	-0.000	0.000	1264.340	6.160	0.000

Z-PLANE (XY-PLANE) IODIUM ANTIMONIDE

	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
50.	3765.462	-2.810	0.000	2289.095	-0.020	0.000	1644.375	14.420	0.000
51.	3761.622	-3.360	0.000	2289.076	-0.030	0.000	1652.458	16.520	0.000
52.	3757.454	-3.910	0.000	2289.057	-0.030	0.000	1661.513	19.250	0.000
53.	3752.666	-4.450	0.000	2289.033	-0.040	0.000	1672.697	21.360	0.000
54.	3747.264	-4.960	0.000	2289.007	-0.040	0.000	1684.756	23.320	0.000
55.	3741.269	-5.510	0.000	2288.976	-0.040	0.000	1696.034	25.000	0.000
56.	3734.683	-6.020	0.000	2288.947	-0.050	0.000	1712.471	26.640	0.000
57.	3727.524	-6.530	0.000	2288.913	-0.050	0.000	1727.999	28.020	0.000
58.	3719.807	-7.020	0.000	2288.877	-0.050	0.000	1744.550	29.230	0.000
59.	3711.540	-7.500	0.000	2288.839	-0.060	0.000	1762.052	30.270	0.000
60.	3702.766	-7.960	0.000	2288.799	-0.060	0.000	1780.429	31.160	0.000
61.	3693.487	-8.400	0.000	2288.757	-0.060	0.000	1799.603	31.890	0.000
62.	3683.729	-8.830	0.000	2288.714	-0.060	0.000	1819.494	32.450	0.000
63.	3673.516	-9.240	0.000	2288.670	-0.060	0.000	1840.022	32.950	0.000
64.	3662.884	-9.620	0.000	2288.625	-0.070	0.000	1861.101	33.290	0.000
65.	3651.856	-9.960	0.000	2288.579	-0.070	0.000	1882.647	33.500	0.000
66.	3640.469	-10.310	0.000	2288.532	-0.070	0.000	1904.773	33.600	0.000
67.	3628.759	-10.610	0.000	2288.485	-0.070	0.000	1926.792	33.590	0.000
68.	3616.765	-10.870	0.000	2288.438	-0.070	0.000	1949.212	33.470	0.000
69.	3604.531	-11.100	0.000	2288.391	-0.070	0.000	1971.743	33.240	0.000
70.	3592.105	-11.260	0.000	2288.344	-0.070	0.000	1994.291	32.910	0.000
71.	3579.538	-11.420	0.000	2288.296	-0.070	0.000	2016.760	32.470	0.000
72.	3566.886	-11.510	0.000	2288.253	-0.060	0.000	2039.053	31.920	0.000
73.	3554.210	-11.540	0.000	2288.209	-0.060	0.000	2061.070	31.270	0.000
74.	3541.573	-11.520	0.000	2288.166	-0.060	0.000	2082.709	30.500	0.000
75.	3529.047	-11.420	0.000	2288.124	-0.060	0.000	2103.663	29.620	0.000
76.	3516.706	-11.260	0.000	2288.064	-0.060	0.000	2124.426	28.620	0.000
77.	3504.633	-11.020	0.000	2288.046	-0.050	0.000	2144.245	27.490	0.000
78.	3492.910	-10.760	0.000	2288.010	-0.050	0.000	2163.329	26.220	0.000
79.	3481.627	-10.290	0.000	2287.976	-0.050	0.000	2181.442	24.620	0.000
80.	3470.876	-9.750	0.000	2287.945	-0.040	0.000	2196.507	23.270	0.000
81.	3460.753	-9.150	0.000	2287.916	-0.040	0.000	2214.406	21.570	0.000
82.	3451.355	-8.500	0.000	2287.889	-0.040	0.000	2229.027	19.710	0.000
83.	3442.776	-7.710	0.000	2287.866	-0.030	0.000	2242.252	17.700	0.000
84.	3435.116	-6.820	0.000	2287.845	-0.030	0.000	2253.372	15.530	0.000
85.	3428.459	-5.850	0.000	2287.826	-0.020	0.000	2264.067	13.210	0.000
86.	3422.687	-4.750	0.000	2287.813	-0.020	0.000	2272.502	10.760	0.000
87.	3418.472	-3.660	0.000	2287.802	-0.010	0.000	2279.137	8.190	0.000
88.	3415.275	-2.470	0.000	2287.793	-0.000	0.000	2283.925	5.510	0.000
89.	3413.338	-1.250	0.000	2287.789	-0.000	0.000	2286.814	2.770	0.000
90.	3412.609	0.000	0.000	2287.787	-0.000	0.000	2287.787	0.000	0.000
91.	3413.538	1.250	0.000	2287.789	0.000	0.000	2286.819	-2.770	0.000
92.	3415.275	2.470	0.000	2287.793	0.000	0.000	2283.925	-5.510	0.000
93.	3418.472	3.660	0.000	2287.802	0.010	0.000	2279.137	-8.190	0.000
94.	3422.687	4.750	0.000	2287.813	0.020	0.000	2272.502	-10.760	0.000
95.	3428.459	5.850	0.000	2287.826	0.020	0.000	2264.067	-13.210	0.000
96.	3435.116	6.820	0.000	2287.845	0.030	0.000	2253.372	-15.530	0.000
97.	3442.776	7.710	0.000	2287.866	0.030	0.000	2242.252	-17.700	0.000
98.	3451.355	8.500	0.000	2287.889	0.040	0.000	2229.027	-19.710	0.000
99.	3460.753	9.150	0.000	2287.916	0.040	0.000	2214.406	-21.570	0.000

BULK

Z-PLANE (XY-PLANE) INDIUM ANTIMONIDE

	LNGVEL	LPHI12	LPHI13	FSPVEL	FSPH12	FSPH13	SSPVEL	SSPH12	SSPH13
100.	3470.876	9.750	0.000	2247.945	.046	0.000	2190.507	-23.270	0.000
101.	3481.827	10.290	0.000	2267.976	.056	0.000	2181.442	-24.620	0.000
102.	3492.910	10.700	0.000	2288.010	.050	0.000	2163.329	-26.220	0.000
103.	3504.633	11.020	0.000	2288.046	.050	0.000	2144.285	-27.450	0.000
104.	3516.706	11.260	0.000	2288.084	.060	0.000	2124.426	-28.620	0.000
105.	3529.047	11.420	0.000	2288.124	.060	0.000	2103.863	-29.620	0.000
106.	3541.573	11.520	0.000	2288.166	.060	0.000	2082.709	-30.500	0.000
107.	3554.210	11.540	0.000	2288.209	.060	0.000	2061.070	-31.270	0.000
108.	3566.866	11.510	0.000	2288.253	.060	0.000	2039.053	-31.920	0.000
109.	3579.536	11.420	0.000	2288.296	.070	0.000	2016.760	-32.470	0.000
110.	3592.105	11.280	0.000	2288.344	.070	0.000	1994.291	-32.910	0.000
111.	3604.531	11.100	0.000	2288.391	.070	0.000	1971.743	-33.240	0.000
112.	3616.765	10.870	0.000	2288.438	.070	0.000	1949.212	-33.470	0.000
113.	3628.769	10.610	0.000	2288.465	.070	0.000	1926.742	-33.590	0.000
114.	3640.469	10.310	0.000	2288.532	.070	0.000	1904.573	-33.600	0.000
115.	3651.856	9.960	0.000	2288.579	.070	0.000	1882.647	-33.500	0.000
116.	3662.864	9.620	0.000	2288.625	.070	0.000	1861.101	-33.290	0.000
117.	3673.516	9.240	0.000	2288.670	.060	0.000	1840.022	-32.950	0.000
118.	3683.729	8.830	0.000	2288.714	.060	0.000	1819.494	-32.490	0.000
119.	3693.467	8.400	0.000	2288.757	.060	0.000	1799.603	-31.990	0.000
120.	3702.766	7.960	0.000	2288.799	.060	0.000	1780.424	-31.460	0.000
121.	3711.546	7.500	0.000	2288.839	.060	0.000	1762.052	-30.270	0.000
122.	3719.807	7.020	0.000	2288.877	.050	0.000	1744.550	-29.230	0.000
123.	3727.524	6.530	0.000	2288.913	.050	0.000	1727.999	-28.620	0.000
124.	3734.683	6.020	0.000	2288.947	.040	0.000	1712.471	-28.640	0.000
125.	3741.269	5.510	0.000	2289.007	.040	0.000	1696.034	-25.060	0.000
126.	3747.266	4.960	0.000	2289.033	.040	0.000	1684.756	-23.320	0.000
127.	3752.666	4.450	0.000	2289.057	.030	0.000	1672.697	-21.300	0.000
128.	3757.454	3.910	0.000	2289.078	.030	0.000	1661.913	-19.250	0.000
129.	3761.622	3.360	0.000	2289.095	.020	0.000	1652.456	-16.520	0.000
130.	3765.162	2.810	0.000	2289.110	.020	0.000	1644.379	-14.420	0.000
131.	3768.066	2.250	0.000	2289.121	.010	0.000	1637.707	-11.760	0.000
132.	3770.333	1.690	0.000	2289.124	.010	0.000	1632.465	-8.950	0.000
133.	3771.954	1.130	0.000	2289.129	.000	0.000	1626.736	-6.040	0.000
134.	3772.926	.570	0.000	2289.134	.000	0.000	1626.478	-3.040	0.000
135.	3773.253	0.000	0.000	2289.136	.000	0.000	1625.725	0.000	0.000
136.	3772.928	-.570	0.000	2289.134	.000	0.000	1626.478	3.040	0.000
137.	3771.954	-1.130	0.000	2289.129	.010	0.000	1626.736	6.040	0.000
138.	3770.333	-1.690	0.000	2289.121	.020	0.000	1632.465	8.950	0.000
139.	3768.066	-2.250	0.000	2289.110	.020	0.000	1637.707	11.760	0.000
140.	3765.162	-2.810	0.000	2289.095	.030	0.000	1644.379	14.420	0.000
141.	3761.622	-3.360	0.000	2289.078	.030	0.000	1652.456	16.920	0.000
142.	3757.454	-3.910	0.000	2289.057	.040	0.000	1661.913	19.250	0.000
143.	3752.666	-4.450	0.000	2289.033	.040	0.000	1672.697	21.300	0.000
144.	3747.266	-4.960	0.000	2289.007	.040	0.000	1684.756	23.320	0.000
145.	3741.269	-5.510	0.000	2288.978	.040	0.000	1696.034	25.060	0.000
146.	3734.683	-6.020	0.000	2288.947	.050	0.000	1712.471	26.640	0.000
147.	3727.524	-6.530	0.000	2288.913	.050	0.000	1727.999	28.620	0.000
148.	3719.807	-7.020	0.000	2288.877	.060	0.000	1744.550	29.230	0.000
149.	3711.546	-7.500	0.000	2288.839	.060	0.000	1762.052	30.270	0.000

Z-PLANE (XY-PLANE) IODIUM ANTIMONIDE

	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	BULK	SSPM12	SSPM13
150.	3702.766	-7.960	0.000	2286.795	-0.060	0.000	1780.429	31.160	0.000
151.	3693.487	-6.400	0.000	2288.757	-0.060	0.000	1799.603	31.690	0.000
152.	3663.729	-8.830	0.000	2288.714	-0.060	0.000	1813.494	32.490	0.000
153.	3673.516	-9.240	0.000	2288.670	-0.060	0.000	1840.022	32.950	0.000
154.	3662.884	-9.620	0.000	2288.625	-0.070	0.000	1861.101	33.250	0.000
155.	3651.856	-9.960	0.000	2288.579	-0.070	0.000	1882.647	33.500	0.000
156.	3640.465	-10.310	0.000	2288.532	-0.070	0.000	1904.573	33.600	0.000
157.	3628.759	-10.610	0.000	2288.485	-0.070	0.000	1926.792	33.590	0.000
158.	3616.765	-10.870	0.000	2288.438	-0.070	0.000	1949.212	33.470	0.000
159.	3604.531	-11.100	0.000	2288.391	-0.070	0.000	1971.743	33.240	0.000
160.	3592.105	-11.420	0.000	2288.344	-0.070	0.000	1994.291	32.510	0.000
161.	3579.538	-11.820	0.000	2288.296	-0.070	0.000	2016.760	32.470	0.000
162.	3566.866	-11.510	0.000	2288.253	-0.060	0.000	2039.053	31.520	0.000
163.	3554.210	-11.540	0.000	2288.209	-0.060	0.000	2061.070	31.270	0.000
164.	3541.573	-11.520	0.000	2288.166	-0.060	0.000	2082.709	30.500	0.000
165.	3529.047	-11.420	0.000	2288.124	-0.060	0.000	2103.663	29.620	0.000
166.	3516.708	-11.260	0.000	2288.084	-0.060	0.000	2124.426	28.620	0.000
167.	3504.653	-11.020	0.000	2288.046	-0.050	0.000	2144.285	27.490	0.000
168.	3492.910	-10.700	0.000	2288.010	-0.050	0.000	2163.329	26.220	0.000
169.	3481.627	-10.290	0.000	2287.976	-0.050	0.000	2181.442	24.620	0.000
170.	3470.876	-9.750	0.000	2287.945	-0.040	0.000	2198.507	23.270	0.000
171.	3460.753	-9.190	0.000	2287.916	-0.040	0.000	2214.408	21.570	0.000
172.	3451.355	-8.500	0.000	2287.889	-0.040	0.000	2229.027	19.710	0.000
173.	3442.776	-7.710	0.000	2287.866	-0.030	0.000	2242.252	17.700	0.000
174.	3435.116	-6.820	0.000	2287.845	-0.030	0.000	2253.972	15.530	0.000
175.	3428.459	-5.850	0.000	2287.828	-0.020	0.000	2264.487	13.210	0.000
176.	3422.867	-4.790	0.000	2287.813	-0.020	0.000	2272.502	10.760	0.000
177.	3418.472	-3.660	0.000	2287.802	-0.010	0.000	2279.137	8.190	0.000
178.	3415.275	-2.470	0.000	2287.793	-0.000	0.000	2283.925	5.510	0.000
179.	3413.336	-1.250	0.000	2287.789	-0.000	0.000	2286.819	2.770	0.000
180.	3412.609	0.000	0.000	2287.787	-0.000	0.000	2287.787	0.000	0.000

111-PLANE INDIUM ANTIMONIDE

BULK

	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
0.	3773.293	-0.000	0.000	2209.136	0.000	0.000	1625.725	0.000	-0.000
1.	3773.306	-0.000	.460	2206.755	-1.090	-1.770	1620.136	0.000	-0.000
2.	3773.464	.180	.330	2207.815	-2.180	-1.540	1627.375	3.320	-1.540
3.	3773.726	.270	1.390	2205.720	-3.260	-2.500	1623.430	4.550	-2.500
4.	3774.086	.360	1.840	2203.076	-4.320	-3.050	1632.293	6.530	-3.050
5.	3774.545	.440	2.290	2279.701	-5.370	-3.600	1635.444	8.070	-4.170
6.	3775.094	.510	2.730	2275.603	-6.400	-4.540	1640.382	9.540	-5.600
7.	3775.727	.580	3.160	2270.804	-7.390	-5.270	1645.564	10.520	-6.510
8.	3776.436	.650	3.580	2265.323	-8.360	-5.560	1651.464	12.270	-7.340
9.	3777.214	.700	3.980	2259.167	-9.300	-6.670	1656.098	13.500	-8.130
10.	3778.051	.750	4.370	2252.424	-10.190	-7.350	1663.376	14.640	-8.890
11.	3778.938	.790	4.750	2245.067	-11.040	-8.020	1673.274	15.690	-9.600
12.	3779.864	.820	5.110	2237.151	-11.830	-8.660	1681.766	16.620	-10.270
13.	3780.820	.840	5.460	2228.715	-12.570	-9.260	1690.769	17.420	-10.890
14.	3781.795	.850	5.780	2219.816	-13.260	-9.860	1698.769	18.130	-11.460
15.	3782.777	.850	6.090	2210.493	-13.890	-10.460	1706.255	18.750	-11.990
16.	3783.756	.850	6.390	2200.810	-14.370	-11.020	1713.519	19.290	-12.470
17.	3784.722	.830	6.660	2190.831	-14.800	-11.550	1720.094	19.750	-12.890
18.	3785.663	.800	6.910	2180.631	-15.126	-12.060	1725.885	19.600	-13.260
19.	3786.570	.770	7.140	2170.297	-15.310	-12.550	1731.094	19.450	-13.580
20.	3787.434	.730	7.360	2159.928	-15.360	-13.000	1735.785	19.650	-13.850
21.	3788.244	.680	7.550	2149.639	-15.220	-13.430	1739.874	19.460	-14.070
22.	3789.093	.620	7.720	2139.567	-14.870	-13.830	1743.491	19.050	-14.240
23.	3789.874	.560	7.880	2129.805	-14.200	-14.210	1746.675	18.400	-14.360
24.	3790.600	.490	8.010	2120.732	-13.360	-14.540	1749.475	17.400	-14.430
25.	3791.274	.410	8.120	2112.366	-12.100	-14.850	1751.855	16.150	-14.450
26.	3791.894	.340	8.210	2105.812	-10.430	-15.110	1753.868	14.530	-14.470
27.	3792.457	.260	8.290	2099.926	-8.350	-15.320	1755.533	12.440	-14.470
28.	3792.964	.170	8.340	2094.342	-5.850	-15.480	1756.894	9.690	-14.470
29.	3793.423	.090	8.370	2089.526	-3.020	-15.560	1757.997	6.900	-14.470
30.	3793.843	.000	8.380	2085.266	0.000	-15.610	1758.770	4.000	-14.470
31.	3794.224	-.050	8.370	2081.495	3.020	-15.560	1759.157	0.000	-14.470
32.	3794.564	-.170	8.340	2078.342	5.850	-15.420	1759.157	-3.550	-14.470
33.	3794.857	-.260	8.290	2075.820	8.350	-15.320	1758.874	-6.900	-14.470
34.	3795.100	-.340	8.210	2105.012	10.430	-15.110	1757.491	-9.690	-14.470
35.	3795.294	-.410	8.120	2112.366	12.100	-14.850	1755.894	-12.440	-14.470
36.	3795.443	-.490	8.010	2120.732	13.360	-14.540	1753.868	-14.450	-14.470
37.	3795.547	-.560	7.880	2129.805	14.200	-14.210	1751.855	-16.150	-14.470
38.	3795.600	-.620	7.720	2139.567	14.870	-13.830	1749.475	-17.400	-14.470
39.	3795.600	-.680	7.550	2149.639	15.220	-13.430	1746.675	-18.400	-14.470
40.	3795.547	-.730	7.360	2159.928	15.360	-13.000	1743.491	-19.050	-14.470
41.	3795.423	-.770	7.140	2170.297	15.310	-12.550	1739.874	-19.450	-14.470
42.	3795.224	-.800	6.910	2180.631	15.126	-12.060	1735.785	-19.600	-14.470
43.	3795.093	-.820	6.660	2190.831	14.800	-11.550	1731.094	-19.750	-14.470
44.	3794.938	-.840	6.390	2200.810	14.370	-11.020	1725.885	-19.890	-14.470
45.	3794.756	-.850	6.090	2210.493	13.890	-10.460	1720.094	-19.950	-14.470
46.	3794.547	-.850	5.780	2219.816	13.260	-9.860	1713.519	-19.950	-14.470
47.	3794.306	-.840	5.460	2228.715	12.570	-9.260	1706.255	-19.750	-14.470
48.	3794.020	-.820	5.110	2237.151	11.830	-8.660	1698.769	-19.450	-14.470
49.	3793.694	-.790	4.750	2245.067	11.040	-8.020	1690.769	-19.290	-14.470
50.	3793.324	-.750	4.370	2252.424	10.190	-7.350	1681.766	-19.050	-14.470

111-PLANE INDIUM ANTIMONIDE

	LNGLVEL	LPMI13	FSPVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13
50.	3778.051	-75.0	4.370	10.190	-7.350	1662.376	-14.640	-8.890
51.	3777.214	-70.0	3.960	9.300	-6.670	1658.096	-13.500	-8.130
52.	3776.436	-65.0	3.560	8.360	-5.960	1651.405	-12.270	-7.330
53.	3775.727	-60.0	3.160	7.390	-5.270	1645.565	-10.950	-6.510
54.	3775.094	-55.0	2.730	6.400	-4.540	1640.382	-9.540	-5.650
55.	3774.545	-50.0	2.290	5.370	-3.800	1635.349	-8.070	-4.750
56.	3774.087	-45.0	1.840	4.320	-3.050	1632.293	-6.530	-3.800
57.	3773.726	-40.0	1.390	3.260	-2.300	1629.430	-4.950	-2.900
58.	3773.464	-35.0	.930	2.160	-1.540	1627.375	-3.320	-1.940
59.	3773.306	-30.0	.460	1.090	-.770	1626.138	-1.670	-.970
60.	3773.253	0.000	0.000	-0.000	0.000	1625.725	-0.000	-0.000
61.	3773.306	0.000	2288.755	-1.050	.770	1626.136	1.670	.970
62.	3773.464	10.0	2287.615	-2.180	1.540	1627.375	3.320	1.940
63.	3773.726	20.0	2286.720	-3.260	2.300	1629.430	4.950	2.900
64.	3774.087	30.0	2285.078	-4.320	3.050	1632.293	6.530	3.800
65.	3774.545	40.0	2283.076	-5.370	3.800	1635.349	8.070	4.750
66.	3775.094	50.0	2279.701	-6.400	4.540	1640.382	9.540	5.650
67.	3775.727	60.0	2275.603	-7.390	5.270	1645.565	10.950	6.510
68.	3776.436	70.0	2269.187	-8.360	5.960	1651.405	12.270	7.330
69.	3777.214	80.0	2259.323	-9.300	6.670	1658.096	13.500	8.130
70.	3778.051	90.0	2252.424	-10.190	7.350	1665.376	14.640	8.890
71.	3778.936	100.0	2245.067	-11.040	8.070	1673.279	15.640	9.590
72.	3779.864	110.0	2237.151	-11.830	8.660	1681.766	16.620	10.260
73.	3780.820	120.0	2228.715	-12.570	9.220	1690.769	17.450	10.890
74.	3781.755	130.0	2219.016	-13.250	9.760	1700.295	18.150	11.460
75.	3782.777	140.0	2209.493	-13.850	10.460	1710.227	18.730	11.970
76.	3783.756	150.0	2200.610	-14.370	11.120	1720.519	19.190	12.440
77.	3784.722	160.0	2190.831	-14.800	11.550	1731.054	19.500	12.860
78.	3785.663	170.0	2180.631	-15.120	12.060	1741.685	19.660	13.260
79.	3786.570	180.0	2170.297	-15.310	12.550	1752.705	19.650	13.610
80.	3787.434	190.0	2159.926	-15.350	13.000	1763.694	19.460	13.900
81.	3788.244	200.0	2149.039	-15.220	13.430	1774.490	19.050	14.140
82.	3788.994	210.0	2139.567	-14.970	13.830	1785.033	18.400	14.340
83.	3789.674	220.0	2129.869	-14.620	14.210	1795.157	17.460	14.500
84.	3790.276	230.0	2120.731	-14.160	14.540	1804.675	16.190	14.610
85.	3790.800	240.0	2112.366	-13.560	14.850	1813.366	14.530	14.680
86.	3791.234	250.0	2105.011	-12.100	15.110	1820.997	12.440	14.700
87.	3791.577	260.0	2098.920	-10.430	15.320	1827.304	9.650	14.700
88.	3791.824	270.0	2094.342	-8.350	15.460	1832.037	6.500	14.700
89.	3791.973	280.0	2091.495	-3.020	15.560	1834.979	3.250	14.700
90.	3792.023	290.0	2090.528	0.000	15.610	1835.977	-0.000	14.600
91.	3791.973	300.0	2091.495	3.020	15.560	1834.979	-3.250	14.700
92.	3791.824	310.0	2094.342	5.050	15.460	1832.037	-6.500	14.700
93.	3791.577	320.0	2098.920	6.350	15.320	1827.304	-9.650	14.700
94.	3791.234	330.0	2105.011	10.430	15.110	1820.997	-12.440	14.530
95.	3790.800	340.0	2112.366	12.100	14.850	1813.366	-14.530	14.610
96.	3790.276	350.0	2120.731	13.560	14.540	1804.675	-16.190	14.500
97.	3789.674	360.0	2129.869	14.260	14.210	1795.157	-17.460	14.340
98.	3788.994	370.0	2139.567	14.620	13.830	1785.033	-18.400	14.140
99.	3788.244	380.0	2149.039	15.220	13.430	1774.490	-19.050	14.140

111-PLANE INDIUM ANTIMONIDE

BULK

	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
100.	3787.434	-7.360	2159.924	15.350	13.000	1763.694	-19.460	13.900
101.	3786.570	-7.140	2170.297	15.316	12.550	1752.785	-19.650	13.610
102.	3785.663	-6.916	2180.631	15.120	12.660	1741.085	-19.600	13.200
103.	3784.722	-6.680	2190.831	14.800	11.550	1731.099	-19.500	12.900
104.	3783.756	-6.390	2200.810	14.370	11.020	1720.519	-19.190	12.470
105.	3782.777	-6.090	2210.493	13.850	10.460	1710.227	-18.730	11.990
106.	3781.795	-5.780	2219.816	13.250	9.860	1700.295	-18.190	11.460
107.	3780.820	-5.460	2228.719	12.570	9.280	1690.789	-17.450	10.890
108.	3779.864	-5.110	2237.151	11.830	8.660	1681.766	-16.620	10.260
109.	3778.936	-4.750	2245.067	11.040	8.020	1673.275	-15.690	9.600
110.	3778.051	-4.370	2252.424	10.190	7.350	1665.376	-14.640	8.930
111.	3777.214	-3.980	2259.187	9.300	6.670	1658.090	-13.500	8.130
112.	3776.436	-3.580	2265.323	8.360	5.960	1651.404	-12.270	7.340
113.	3775.727	-3.160	2270.804	7.390	5.270	1645.369	-10.950	6.510
114.	3775.054	-2.730	2275.603	6.400	4.540	1640.382	-9.540	5.650
115.	3774.546	-2.290	2279.701	5.370	3.820	1635.945	-8.070	4.770
116.	3774.086	-1.840	2283.078	4.320	3.050	1632.293	-6.530	3.840
117.	3773.726	-1.390	2285.720	3.260	2.300	1629.430	-4.950	2.900
118.	3773.464	-0.930	2287.615	2.160	1.540	1627.375	-3.320	1.940
119.	3773.306	-0.460	2288.755	1.090	.770	1626.136	-1.670	.970
120.	3773.253	0.000	2289.136	0.000	0.000	1625.725	0.000	-0.000
121.	3773.306	.560	2289.755	-1.090	-1.770	1626.136	1.670	-1.970
122.	3773.484	1.390	2287.615	-2.160	-3.820	1627.375	3.320	-4.950
123.	3773.726	2.290	2283.078	-3.260	-6.400	1629.430	4.950	-8.130
124.	3774.086	3.160	2275.603	-4.320	-9.280	1632.293	6.530	-10.890
125.	3774.546	4.000	2270.804	-5.370	-12.570	1635.945	8.070	-13.610
126.	3775.054	4.840	2270.297	-6.400	-15.310	1640.382	9.540	-16.260
127.	3775.727	5.580	2265.323	-7.390	-18.190	1645.369	10.950	-18.730
128.	3776.436	6.290	2259.187	-8.360	-21.040	1651.404	12.270	-21.040
129.	3777.214	6.980	2252.424	-9.300	-23.980	1658.090	13.500	-23.980
130.	3778.051	7.650	2245.067	-10.190	-26.910	1665.376	14.640	-26.910
131.	3778.936	8.300	2237.151	-11.040	-29.840	1673.275	15.690	-29.840
132.	3779.864	8.930	2228.719	-11.830	-32.770	1681.766	16.620	-32.770
133.	3780.820	9.540	2220.816	-12.570	-35.700	1690.789	17.450	-35.700
134.	3781.795	10.140	2212.424	-13.250	-38.630	1700.295	18.190	-38.630
135.	3782.777	10.730	2203.631	-13.980	-41.560	1710.227	18.730	-41.560
136.	3783.756	11.310	2194.424	-14.670	-44.490	1720.519	19.190	-44.490
137.	3784.722	11.880	2184.810	-15.310	-47.420	1731.099	19.500	-47.420
138.	3785.663	12.440	2174.816	-15.920	-50.350	1741.085	19.600	-50.350
139.	3786.570	13.000	2164.424	-16.500	-53.280	1752.785	19.650	-53.280
140.	3787.434	13.550	2153.631	-17.040	-56.210	1763.694	19.460	-56.210
141.	3788.244	14.090	2142.424	-17.550	-59.140	1774.491	19.050	-59.140
142.	3788.993	14.620	2130.816	-18.020	-62.070	1785.033	18.400	-62.070
143.	3789.674	15.140	2118.810	-18.460	-65.000	1795.157	17.460	-65.000
144.	3790.278	15.650	2106.424	-18.870	-67.930	1804.675	16.190	-67.930
145.	3790.800	16.150	2093.631	-19.250	-70.860	1813.366	14.650	-70.860
146.	3791.234	16.640	2080.424	-19.600	-73.790	1821.997	12.440	-73.790
147.	3791.577	17.120	2066.816	-20.000	-76.720	1829.304	9.690	-76.720
148.	3791.824	17.590	2052.755	-20.350	-79.650	1835.037	6.900	-79.650
149.	3791.973	18.050	2038.244	-20.650	-82.580	1839.474	3.550	-82.580

111-PLANE INDIUM ANTIMONIDE

BULK

	LNGVEL	LPM112	LPM113	FSRVEL	FSPM112	FSPM113	SSRVEL	SSPM112	SSPM113
150.	3792.023	0.000	8.380	2090.526	-0.066	-15.610	1035.976	-0.000	-1.000
151.	3791.973	-0.050	8.370	2091.495	3.020	-15.580	1834.979	-3.550	-14.800
152.	3791.824	-0.170	8.340	2094.342	5.850	-15.460	1632.037	-6.900	-14.750
153.	3791.577	-0.260	8.290	2098.920	8.350	-15.320	1027.304	-9.850	-14.700
154.	3791.234	-0.340	8.210	2105.012	10.430	-15.110	1020.987	-12.440	-14.650
155.	3790.800	-0.410	8.120	2112.366	12.100	-14.850	1013.366	-14.530	-14.600
156.	3790.278	-0.490	8.010	2120.732	13.360	-14.540	1004.672	-16.190	-14.550
157.	3789.674	-0.560	7.880	2129.065	14.260	-14.210	1795.157	-17.460	-14.500
158.	3788.993	-0.620	7.720	2139.567	14.670	-13.830	1765.133	-18.400	-14.450
159.	3788.244	-0.680	7.550	2149.639	15.220	-13.430	1774.491	-19.050	-14.400
160.	3787.434	-0.730	7.360	2154.928	15.350	-13.000	1763.694	-19.460	-14.350
161.	3786.576	-0.770	7.140	2170.297	15.310	-12.550	1752.765	-19.650	-14.300
162.	3785.663	-0.800	6.910	2180.631	15.120	-12.080	1741.005	-19.600	-14.250
163.	3784.722	-0.830	6.660	2190.831	14.800	-11.550	1731.009	-19.500	-14.200
164.	3783.756	-0.850	6.390	2200.810	14.370	-11.020	1720.519	-19.390	-14.150
165.	3782.777	-0.870	6.090	2210.493	13.650	-10.440	1710.227	-19.250	-14.100
166.	3781.755	-0.890	5.780	2219.816	13.250	-9.860	1700.245	-19.100	-14.050
167.	3780.820	-0.900	5.460	2228.715	12.570	-9.280	1690.789	-18.950	-14.000
168.	3779.864	-0.920	5.110	2237.151	11.830	-8.690	1681.766	-18.800	-13.950
169.	3778.936	-0.930	4.750	2245.067	11.040	-8.020	1673.279	-18.650	-13.900
170.	3778.051	-0.950	4.370	2252.424	10.190	-7.350	1665.376	-18.500	-13.850
171.	3777.214	-0.970	3.980	2259.187	9.300	-6.670	1658.090	-18.350	-13.800
172.	3776.436	-0.980	3.580	2265.323	8.360	-5.940	1651.464	-18.200	-13.750
173.	3775.727	-0.990	3.180	2270.804	7.390	-5.270	1645.569	-18.050	-13.700
174.	3775.094	-1.000	2.730	2275.603	6.400	-4.540	1640.362	-17.900	-13.650
175.	3774.545	-0.940	2.290	2279.701	5.370	-3.800	1635.854	-17.750	-13.600
176.	3774.066	-0.960	1.840	2283.076	4.320	-3.050	1632.253	-17.600	-13.550
177.	3773.728	-0.970	1.390	2285.720	3.260	-2.300	1629.430	-17.450	-13.500
178.	3773.464	-0.980	0.930	2287.615	2.180	-1.540	1627.375	-17.300	-13.450
179.	3773.386	-0.990	0.460	2288.755	1.090	-0.770	1625.130	-17.150	-13.400
180.	3773.253	-0.000	-0.000	2289.136	-0.000	0.000	1625.725	-0.000	-0.000

110-PLANE INDIUM ANTIMONIDE

BULK

	LNQVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	3867.072	0.000	-0.000	1872.606	-19.206	0.000	1872.599	19.206	0.000
1.	3866.838	-0.400	-0.000	1861.608	-18.066	-0.000	1864.016	19.190	0.000
2.	3866.130	-0.800	-0.000	1851.409	-16.840	-0.000	1852.489	19.160	0.000
3.	3864.936	-1.220	-0.000	1842.059	-15.490	-0.000	1807.004	19.110	0.000
4.	3863.246	-1.640	-0.000	1833.603	-14.036	-0.000	1816.545	19.030	0.000
5.	3861.060	-2.060	-0.000	1826.084	-12.450	-0.000	1830.099	18.930	0.000
6.	3878.364	-2.500	-0.000	1819.537	-10.760	-0.000	1841.651	18.810	0.000
7.	3875.155	-2.930	-0.000	1813.996	-9.020	-0.000	1853.166	18.660	0.000
8.	3871.431	-3.370	-0.000	1809.495	-7.176	-0.000	1864.693	18.520	0.000
9.	3867.185	-3.820	-0.000	1806.055	-5.266	-0.000	1876.157	18.350	0.000
10.	3862.426	-4.260	-0.000	1803.697	-3.296	-0.000	1887.565	18.160	0.000
11.	3857.144	-4.710	-0.000	1802.437	-1.290	-0.000	1898.904	17.950	0.000
12.	3851.343	-5.150	-0.000	1802.286	.740	-0.000	2010.162	17.726	0.000
13.	3845.026	-5.600	-0.000	1803.249	2.770	-0.000	2021.326	17.490	0.000
14.	3838.196	-6.040	-0.000	1805.326	4.766	-0.000	2032.365	17.230	-0.000
15.	3830.858	-6.460	-0.000	1808.516	6.760	-0.000	2043.326	16.960	0.000
16.	3823.016	-6.910	-0.000	1812.604	8.690	-0.000	2054.140	16.680	0.000
17.	3814.684	-7.340	-0.000	1816.176	10.524	-0.000	2064.813	16.390	0.000
18.	3805.864	-7.770	0.000	1824.618	12.346	-0.000	2075.337	16.090	0.000
19.	3796.566	-8.160	-0.000	1832.097	14.030	-0.000	2085.699	15.770	0.000
20.	3786.810	-8.550	0.000	1840.586	15.630	-0.000	2095.691	15.440	0.000
21.	3776.600	-8.930	-0.000	1850.056	17.120	-0.000	2105.502	15.100	0.000
22.	3765.956	-9.360	-0.000	1860.462	18.490	-0.000	2115.723	14.750	0.000
23.	3754.692	-9.760	-0.000	1871.764	19.760	-0.000	2125.344	14.390	0.000
24.	3743.427	-10.120	-0.000	1883.915	20.910	-0.000	2134.757	14.020	0.000
25.	3731.582	-10.460	-0.000	1896.866	21.940	-0.000	2143.953	13.650	0.000
26.	3719.379	-10.790	0.000	1910.561	22.850	-0.000	2152.923	13.260	0.000
27.	3706.842	-11.100	0.000	1924.945	23.640	-0.000	2161.660	12.870	0.000
28.	3693.996	-11.390	0.000	1939.957	24.320	-0.000	2170.155	12.460	0.000
29.	3680.875	-11.650	-0.000	1955.532	24.890	-0.000	2178.402	12.060	0.000
30.	3667.506	-11.890	0.000	1971.605	25.346	-0.000	2186.393	11.640	0.000
31.	3653.925	-12.100	0.000	1988.107	25.690	-0.000	2194.120	11.220	0.000
32.	3640.169	-12.280	0.000	2004.964	25.920	-0.000	2201.579	10.790	0.000
33.	3626.275	-12.420	-0.000	2022.102	26.050	-0.000	2208.762	10.350	0.000
34.	3612.299	-12.530	-0.000	2039.442	26.076	-0.000	2215.663	9.910	0.000
35.	3598.276	-12.590	-0.000	2056.904	25.966	-0.000	2222.276	9.470	0.000
36.	3584.262	-12.610	0.000	2074.405	25.796	-0.000	2228.597	9.020	0.000
37.	3570.312	-12.570	0.000	2091.856	25.466	-0.000	2234.615	8.560	0.000
38.	3556.466	-12.490	0.000	2109.170	25.080	-0.000	2240.339	8.100	0.000
39.	3542.846	-12.340	0.000	2126.253	24.530	-0.000	2245.751	7.640	0.000
40.	3529.460	-12.130	0.000	2143.009	23.880	-0.000	2250.850	7.170	0.000
41.	3516.402	-11.840	0.000	2159.341	23.110	-0.000	2255.634	6.700	0.000
42.	3503.745	-11.490	0.000	2175.148	22.220	-0.000	2260.096	6.220	0.000
43.	3491.571	-11.090	0.000	2190.326	21.200	-0.000	2264.236	5.750	0.000
44.	3479.961	-10.540	0.000	2204.775	20.050	-0.000	2268.051	5.270	0.000
45.	3469.001	-9.940	0.000	2218.386	18.770	-0.000	2271.535	4.760	0.000
46.	3458.777	-9.240	0.000	2231.055	17.350	-0.000	2274.687	4.300	0.000
47.	3449.375	-8.460	0.000	2242.680	15.790	-0.000	2277.503	3.610	0.000
48.	3440.681	-7.600	0.000	2253.162	14.100	-0.000	2279.983	3.320	0.000
49.	3433.375	-6.650	0.000	2262.405	12.280	-0.000	2282.123	2.630	0.000

110-PLANE INDIUM ANTIMONIDE

	LMGVEL	LPMI12	LPMI13	FSRVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13
50.	3426.935	-5.620	0.000	2270.322	10.340	-0.000	2283.523	2.340	0.000
51.	3421.626	-4.520	0.000	2276.036	6.290	-0.000	2285.381	1.620	0.000
52.	3417.514	-3.360	0.000	2281.079	6.150	-0.000	2286.496	1.350	0.000
53.	3414.640	-2.158	0.000	2285.399	3.900	-0.000	2287.267	.860	0.000
54.	3413.041	-.920	0.000	2287.357	1.660	-0.000	2287.693	.360	0.000
55.	3412.734	.330	0.000	2287.775	-.130	-0.000	2287.732	-.600	0.000
56.	3413.725	1.570	0.000	2286.515	-2.860	0.000	2287.511	-.630	0.000
57.	3416.001	2.790	0.000	2283.733	-5.110	0.000	2286.903	-1.120	0.000
58.	3419.534	3.900	0.000	2279.403	-7.250	0.000	2285.950	-1.610	0.000
59.	3424.245	5.110	0.000	2273.576	-9.300	0.000	2284.654	-2.110	0.000
60.	3430.198	6.170	0.000	2266.312	-11.360	0.000	2283.016	-2.600	0.000
61.	3437.210	7.160	0.000	2257.684	-13.260	0.000	2281.036	-3.090	0.000
62.	3445.248	8.070	0.000	2247.776	-15.010	0.000	2276.716	-3.500	0.000
63.	3455.232	8.850	0.000	2236.679	-16.630	0.000	2270.056	-4.070	0.000
64.	3464.076	9.620	0.000	2224.489	-18.120	0.000	2273.064	-4.560	0.000
65.	3474.702	10.270	0.000	2211.310	-19.460	0.000	2265.737	-5.040	0.000
66.	3486.015	10.820	0.000	2197.245	-20.680	0.000	2260.079	-5.520	0.000
67.	3497.934	11.290	0.000	2182.396	-21.760	0.000	2262.092	-6.000	0.000
68.	3510.373	11.690	0.000	2166.074	-22.710	0.000	2257.701	-6.480	0.000
69.	3523.251	12.000	0.000	2150.777	-23.540	0.000	2253.150	-6.950	0.000
70.	3536.492	12.250	0.000	2134.208	-24.240	0.000	2248.157	-7.420	0.000
71.	3550.020	12.420	0.000	2117.267	-24.830	0.000	2242.332	-7.880	0.000
72.	3563.767	12.540	0.000	2100.051	-25.300	0.000	2237.357	-8.350	0.000
73.	3577.666	12.600	0.000	2082.653	-25.650	0.000	2231.477	-8.800	0.000
74.	3591.657	12.600	0.000	2065.165	-25.900	0.000	2225.297	-9.260	0.000
75.	3605.683	12.560	0.000	2047.674	-26.040	0.000	2219.821	-9.700	0.000
76.	3619.689	12.480	0.000	2030.266	-26.070	0.000	2212.055	-10.150	0.000
77.	3633.627	12.350	0.000	2013.022	-26.000	0.000	2205.004	-10.560	0.000
78.	3647.452	12.150	0.000	1996.023	-25.610	0.000	2197.675	-10.920	0.000
79.	3661.120	12.000	0.000	1979.345	-25.520	0.000	2190.073	-11.440	0.000
80.	3674.594	11.770	0.000	1963.061	-25.120	0.000	2182.206	-11.860	0.000
81.	3687.037	11.520	0.000	1947.242	-24.600	0.000	2174.079	-12.270	0.000
82.	3700.016	11.240	0.000	1931.986	-23.960	0.000	2165.700	-12.660	0.000
83.	3713.502	10.940	0.000	1917.288	-23.240	0.000	2157.076	-13.080	0.000
84.	3725.866	10.620	0.000	1903.241	-22.360	0.000	2148.215	-13.460	0.000
85.	3737.883	10.280	0.000	1889.931	-21.410	0.000	2139.125	-13.850	0.000
86.	3749.524	9.930	0.000	1877.396	-20.310	0.000	2129.814	-14.220	0.000
87.	3760.785	9.560	0.000	1865.667	-19.110	0.000	2120.290	-14.580	0.000
88.	3771.629	9.180	0.000	1854.453	-17.760	0.000	2110.562	-14.940	0.000
89.	3782.046	8.780	0.000	1844.937	-16.340	0.000	2100.639	-15.280	0.000
90.	3792.019	8.360	0.000	1835.981	-14.800	0.000	2090.532	-15.610	0.000
91.	3801.595	7.960	0.000	1828.020	-13.150	0.000	2080.268	-15.940	0.000
92.	3810.581	7.540	0.000	1821.086	-11.400	0.000	2069.800	-16.250	0.000
93.	3819.145	7.120	0.000	1815.207	-9.560	0.000	2059.136	-16.550	0.000
94.	3827.219	6.680	0.000	1810.464	-7.660	0.000	2048.447	-16.830	0.000
95.	3834.725	6.250	0.000	1806.585	-5.720	0.000	2037.564	-17.110	0.000
96.	3841.866	5.800	0.000	1804.092	-3.720	0.000	2026.559	-17.370	0.000
97.	3848.426	5.360	0.000	1802.602	-1.700	0.000	2015.443	-17.610	0.000
98.	3854.471	4.920	0.000	1802.227	.330	0.000	2004.220	-17.840	0.000
99.	3859.998	4.470	0.000	1802.965	2.350	0.000	1992.926	-18.060	0.000

110-PLANE INDIUM ANTIMONIDE

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13
100.	3865.006	4.030	0.000	1804.806	4.340	0.000	1941.549	-10.260	-0.000
101.	3869.493	3.580	-0.000	1807.738	6.280	0.000	1970.110	-10.440	-0.000
102.	3873.462	3.140	-0.000	1811.742	8.160	0.000	1990.622	-10.610	-0.000
103.	3876.913	2.700	0.000	1816.795	9.960	0.000	1947.036	-10.750	-0.000
104.	3879.851	2.270	0.000	1822.870	11.660	0.000	1935.532	-10.860	-0.000
105.	3882.276	1.840	0.000	1829.935	13.300	0.000	1923.998	-10.990	-0.000
106.	3884.201	1.410	0.000	1837.954	14.810	0.000	1912.469	-11.070	-0.000
107.	3885.627	1.000	-0.000	1846.067	16.220	0.000	1900.920	-11.140	-0.000
108.	3886.564	.590	-0.000	1856.691	17.510	0.000	1889.425	-11.160	-0.000
109.	3887.020	.190	0.000	1867.315	18.650	0.000	1877.980	-11.200	-0.000
110.	3887.008	-.210	0.000	1878.722	19.750	0.000	1866.599	-11.260	-0.000
111.	3886.536	-.590	-0.000	1890.042	20.650	0.000	1855.237	-11.170	-0.000
112.	3885.624	-.960	0.000	1903.641	21.530	0.000	1844.030	-11.120	-0.000
113.	3884.280	-1.310	0.000	1917.046	22.250	0.000	1832.933	-11.030	-0.000
114.	3882.523	-1.650	-0.000	1931.002	22.870	0.000	1822.021	-10.920	-0.000
115.	3880.371	-1.960	-0.000	1945.451	23.370	0.000	1811.192	-10.790	-0.000
116.	3877.842	-2.250	-0.000	1960.330	23.700	0.000	1800.520	-10.620	-0.000
117.	3874.956	-2.590	-0.000	1975.576	24.060	0.000	1790.022	-10.420	-0.000
118.	3871.736	-2.860	-0.000	1991.125	24.260	-0.000	1779.713	-10.190	-0.000
119.	3868.206	-3.120	-0.000	2006.912	24.350	0.000	1769.609	-10.930	0.000
120.	3864.390	-3.350	0.000	2022.671	24.410	0.000	1759.727	-10.640	-0.000
121.	3860.315	-3.560	-0.000	2038.935	24.340	0.000	1750.061	-10.310	0.000
122.	3856.010	-3.750	0.000	2055.036	24.170	0.000	1740.609	-10.950	0.000
123.	3851.503	-3.910	0.000	2071.112	23.930	0.000	1731.566	-10.560	0.000
124.	3846.820	-4.050	-0.000	2087.090	23.540	0.000	1722.727	-10.120	0.000
125.	3842.015	-4.150	-0.000	2102.904	23.170	0.000	1714.167	-10.600	-0.000
126.	3837.101	-4.230	-0.000	2118.467	22.670	0.000	1705.982	-10.150	-0.000
127.	3832.119	-4.280	-0.000	2133.772	22.090	0.000	1698.065	-10.610	-0.000
128.	3827.106	-4.290	-0.000	2148.691	21.420	0.000	1690.512	-10.040	0.000
129.	3822.103	-4.260	-0.000	2163.176	20.660	0.000	1683.316	-13.420	0.000
130.	3817.145	-4.230	-0.000	2177.160	19.850	0.000	1676.491	-12.700	0.000
131.	3812.273	-4.140	-0.000	2190.595	18.950	0.000	1670.030	-12.690	0.000
132.	3807.525	-4.020	-0.000	2203.396	17.970	0.000	1664.004	-11.560	-0.000
133.	3802.941	-3.870	-0.000	2215.514	16.910	0.000	1658.366	-10.630	0.000
134.	3798.560	-3.660	-0.000	2226.085	15.770	0.000	1653.146	-9.840	0.000
135.	3794.421	-3.460	-0.000	2237.452	14.570	0.000	1648.356	-9.030	0.000
136.	3790.560	-3.210	-0.000	2247.162	13.290	0.000	1644.004	-8.190	-0.000
137.	3787.013	-2.930	0.000	2255.965	11.950	0.000	1640.100	-7.320	-0.000
138.	3783.814	-2.610	0.000	2263.813	10.550	0.000	1636.691	-6.430	0.000
139.	3780.992	-2.260	-0.000	2270.664	9.090	0.000	1633.665	-5.510	0.000
140.	3778.576	-1.920	0.000	2276.480	7.580	0.000	1631.148	-4.580	0.000
141.	3776.590	-1.530	-0.000	2281.226	6.030	0.000	1629.105	-3.630	0.000
142.	3775.052	-1.140	-0.000	2284.861	4.440	0.000	1627.539	-2.670	0.000
143.	3773.980	-.730	-0.000	2287.419	2.830	0.000	1626.456	-1.700	0.000
144.	3773.384	-.310	0.000	2288.827	1.200	0.000	1625.056	-.720	0.000
145.	3773.269	.110	0.000	2289.096	-.430	0.000	1623.742	.260	0.000
146.	3773.639	.520	0.000	2288.225	-2.060	-0.000	1626.112	1.240	0.000
147.	3774.487	.940	0.000	2286.215	-3.650	-0.000	1620.968	2.210	0.000
148.	3775.807	1.350	0.000	2283.090	-5.280	-0.000	1620.306	3.100	0.000
149.	3777.584	1.740	0.000	2278.856	-6.850	-0.000	1630.124	4.140	0.000

110-PLANE INDIUM ANTIMONIDE

BULK

	LPM112	LPM113	FSRVEL	FSPM112	FSPM113	SSRVEL	SSPM112	SSPM113
150.	3779.800	2.110	0.000	2273.540	-6.380	1632.416	5.060	0.000
151.	3782.433	2.460	0.000	2267.173	-9.860	1635.134	6.000	0.000
152.	3785.850	2.760	0.000	2259.791	-11.290	1638.415	6.500	0.000
153.	3788.845	3.060	0.000	2251.433	-12.670	1642.115	7.780	0.000
154.	3792.562	3.350	0.000	2242.145	-13.970	1646.247	8.640	0.000
155.	3796.574	3.560	0.000	2231.976	-15.210	1650.631	9.460	0.000
156.	3800.845	3.780	0.000	2220.976	-16.360	1655.849	10.260	0.000
157.	3805.336	3.950	0.000	2209.206	-17.470	1661.231	11.030	0.000
158.	3810.014	4.090	0.000	2196.720	-18.490	1667.136	11.760	0.000
159.	3814.832	4.190	0.000	2183.579	-19.430	1673.402	12.460	0.000
160.	3819.755	4.260	0.000	2169.647	-20.300	1680.048	13.120	0.000
161.	3824.742	4.290	0.000	2155.587	-21.060	1687.070	13.750	0.000
162.	3829.755	4.290	0.000	2140.863	-21.760	1694.427	14.350	0.000
163.	3834.756	4.260	0.000	2125.743	-22.410	1702.133	14.900	0.000
164.	3839.706	4.190	0.000	2110.293	-22.950	1710.265	15.420	0.000
165.	3844.571	4.100	0.000	2094.579	-23.400	1718.658	15.910	0.000
166.	3849.316	3.960	0.000	2078.670	-23.760	1727.326	16.360	0.000
167.	3853.906	3.830	0.000	2062.633	-24.070	1736.349	16.770	0.000
168.	3858.310	3.650	0.000	2046.535	-24.270	1745.616	17.150	0.000
169.	3862.457	3.450	0.000	2030.444	-24.390	1755.144	17.490	0.000
170.	3866.439	3.230	0.000	2014.427	-24.410	1764.916	17.800	0.000
171.	3870.107	2.950	0.000	1998.551	-24.350	1774.917	18.680	0.000
172.	3873.477	2.720	0.000	1982.862	-24.190	1785.131	19.320	0.000
173.	3876.523	2.430	0.000	1967.485	-23.930	1795.542	19.530	0.000
174.	3879.223	2.130	0.000	1952.424	-23.560	1806.134	19.710	0.000
175.	3881.556	1.810	0.000	1937.765	-23.120	1816.891	19.860	0.000
176.	3883.501	1.480	0.000	1923.566	-22.560	1827.796	19.990	0.000
177.	3885.042	1.130	0.000	1909.895	-21.690	1838.837	19.000	0.000
178.	3886.161	.760	0.000	1896.806	-21.110	1849.934	19.150	0.000
179.	3886.842	.350	0.000	1884.359	-20.210	1861.233	19.150	0.000
180.	3887.072	0.000	-0.000	1872.608	-19.200	1872.599	19.200	0.000

Z-PLANE (XY-PLANE) INDIUM ARSENIDE									
	LNGLVL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSKVEL	SSPH12	SSPH13
0.	3822.601	0.000	0.000	2635.453	0.000	0.000	2635.453	0.000	0.000
1.	3823.446	1.450	0.000	2634.227	-3.050	0.000	2635.454	0.000	0.000
2.	3825.968	2.670	0.000	2630.564	-6.050	0.000	2635.456	0.000	0.000
3.	3830.125	4.240	0.000	2624.507	-8.970	0.000	2635.459	0.000	0.000
4.	3835.653	5.530	0.000	2616.126	-11.770	0.000	2635.463	-0.000	0.000
5.	3843.067	6.740	0.000	2605.520	-14.410	0.000	2635.469	0.000	0.000
6.	3851.661	7.830	0.000	2592.798	-16.890	0.000	2635.476	0.000	0.000
7.	3861.520	8.810	0.000	2576.091	-19.160	0.000	2635.484	0.000	0.000
8.	3872.515	9.660	0.000	2561.541	-21.290	0.000	2635.493	0.000	0.000
9.	3884.527	10.420	0.000	2543.294	-23.220	0.000	2635.504	0.000	0.000
10.	3897.413	11.050	0.000	2523.503	-24.914	0.000	2635.515	0.000	0.000
11.	3911.047	11.560	0.000	2502.320	-26.360	0.000	2635.527	0.000	0.000
12.	3925.304	11.970	0.000	2479.896	-27.580	0.000	2635.540	0.000	0.000
13.	3940.063	12.280	0.000	2456.360	-28.250	0.000	2635.554	0.000	0.000
14.	3955.210	12.500	0.000	2431.915	-30.390	0.000	2635.569	0.000	0.000
15.	3970.636	12.630	0.000	2406.643	-31.390	0.000	2635.585	0.000	0.000
16.	3986.247	12.650	0.000	2380.699	-32.270	0.000	2635.601	0.000	0.000
17.	4001.947	12.680	0.000	2354.212	-33.030	0.000	2635.616	0.000	0.000
18.	4017.651	12.690	0.000	2327.311	-33.660	0.000	2635.635	0.000	0.000
19.	4033.282	12.676	0.000	2300.110	-34.220	0.000	2635.653	0.000	0.000
20.	4048.767	12.620	0.000	2272.747	-34.650	0.000	2635.671	0.000	0.000
21.	4064.043	12.060	0.000	2245.317	-34.960	0.000	2635.689	0.000	0.000
22.	4079.046	11.720	0.000	2217.940	-35.210	0.000	2635.707	0.000	0.000
23.	4093.729	11.470	0.000	2190.725	-35.330	0.000	2635.720	0.000	0.000
24.	4108.036	11.130	0.000	2163.778	-35.340	0.000	2635.744	0.000	0.000
25.	4121.923	10.750	0.000	2137.205	-35.240	0.000	2635.762	0.000	0.000
26.	4135.349	10.360	0.000	2111.110	-35.020	0.000	2635.780	0.000	0.000
27.	4148.276	9.920	0.000	2085.593	-34.690	0.000	2635.798	0.000	0.000
28.	4160.671	9.470	0.000	2060.755	-34.220	0.000	2635.815	0.000	0.000
29.	4172.592	9.000	0.000	2036.654	-33.630	0.000	2635.832	0.000	0.000
30.	4183.741	8.520	0.000	2013.507	-32.860	0.000	2635.840	0.000	0.000
31.	4194.361	8.010	0.000	1991.208	-31.960	0.000	2635.864	0.000	0.000
32.	4204.341	7.450	0.000	1970.130	-30.920	0.000	2635.879	0.000	0.000
33.	4213.659	6.960	0.000	1950.121	-29.690	0.000	2635.893	0.000	0.000
34.	4222.286	6.420	0.000	1931.350	-28.270	0.000	2635.906	0.000	0.000
35.	4230.235	5.870	0.000	1913.699	-26.650	0.000	2635.918	0.000	0.000
36.	4237.461	5.300	0.000	1897.846	-24.830	0.000	2635.930	0.000	0.000
37.	4243.961	4.730	0.000	1883.267	-22.800	0.000	2635.940	0.000	0.000
38.	4249.722	4.160	0.000	1870.225	-20.560	0.000	2635.949	0.000	0.000
39.	4254.736	3.570	0.000	1858.795	-18.110	0.000	2635.957	0.000	0.000
40.	4258.992	2.960	0.000	1849.021	-15.460	0.000	2635.964	0.000	0.000
41.	4262.465	2.350	0.000	1840.955	-12.630	0.000	2635.970	0.000	0.000
42.	4265.207	1.800	0.000	1834.639	-9.620	0.000	2635.974	0.000	0.000
43.	4267.155	1.200	0.000	1830.104	-6.490	0.000	2635.977	0.000	0.000
44.	4268.325	.600	0.000	1827.374	-3.270	0.000	2635.979	0.000	0.000
45.	4268.715	0.000	0.000	1826.462	0.000	0.000	2635.980	0.000	0.000
46.	4268.325	-0.600	0.000	1827.374	3.270	0.000	2635.979	-0.000	0.000
47.	4267.155	-1.200	0.000	1830.104	6.490	0.000	2635.977	-0.000	0.000
48.	4265.207	-1.800	0.000	1834.639	9.620	0.000	2635.974	-0.000	0.000
49.	4262.465	-2.350	0.000	1840.955	12.630	0.000	2635.970	-0.000	0.000

Z-PLANE (XY-PLANE) INDIUM ARSENIDE

	LNWEL	LPM12	LPM13	FSRWEL	FSPM12	FSPM13	SSRWEL	SSPM12	SSPM13
50.	4258.992	-2.968	0.000	1849.021	15.460	0.000	2835.964	-0.010	0.000
51.	4254.736	-3.570	0.000	1858.795	16.110	0.000	2835.957	-0.010	0.000
52.	4249.722	-4.168	0.000	1870.329	20.560	0.000	2835.949	-0.010	0.000
53.	4243.961	-4.730	0.000	1883.267	22.800	0.000	2835.940	-0.010	0.000
54.	4237.461	-5.300	0.000	1897.846	24.830	0.000	2835.930	-0.010	0.000
55.	4230.235	-5.870	0.000	1913.899	26.650	0.000	2835.918	-0.010	0.000
56.	4222.296	-6.420	0.000	1931.350	28.270	0.000	2835.906	-0.020	0.000
57.	4213.659	-6.960	0.000	1950.121	29.690	0.000	2835.893	-0.020	0.000
58.	4204.341	-7.490	0.000	1970.130	30.921	0.000	2835.875	-0.020	0.000
59.	4194.361	-8.010	0.000	1991.288	31.980	0.000	2835.864	-0.020	0.000
60.	4183.741	-8.520	0.000	2013.507	32.860	0.000	2835.864	-0.020	0.000
61.	4172.502	-9.000	0.000	2036.894	33.630	0.000	2835.832	-0.020	0.000
62.	4160.671	-9.470	0.000	2060.755	34.320	0.000	2835.815	-0.020	0.000
63.	4148.276	-9.920	0.000	2085.593	34.890	0.000	2835.798	-0.020	0.000
64.	4135.349	-10.350	0.000	2111.110	35.020	0.000	2835.760	-0.020	0.000
65.	4121.923	-10.750	0.000	2137.205	35.240	0.000	2835.762	-0.020	0.000
66.	4108.036	-11.130	0.000	2163.778	35.340	0.000	2835.744	-0.020	0.000
67.	4093.729	-11.470	0.000	2190.725	35.330	0.000	2835.726	-0.020	0.000
68.	4079.046	-11.780	0.000	2217.940	35.210	0.000	2835.707	-0.020	0.000
69.	4064.043	-12.060	0.000	2245.317	34.980	0.000	2835.689	-0.020	0.000
70.	4048.767	-12.250	0.000	2272.747	34.650	0.000	2835.671	-0.020	0.000
71.	4033.282	-12.470	0.000	2300.116	34.220	0.000	2835.653	-0.020	0.000
72.	4017.651	-12.600	0.000	2327.311	33.680	0.000	2835.635	-0.020	0.000
73.	4001.947	-12.680	0.000	2354.212	33.030	0.000	2835.618	-0.020	0.000
74.	3986.247	-12.690	0.000	2380.699	32.270	0.000	2835.601	-0.020	0.000
75.	3970.636	-12.630	0.000	2406.843	31.390	0.000	2835.585	-0.020	0.000
76.	3955.210	-12.500	0.000	2431.915	30.350	0.000	2835.569	-0.020	0.000
77.	3940.063	-12.280	0.000	2456.380	29.250	0.000	2835.554	-0.020	0.000
78.	3925.304	-11.970	0.000	2479.896	27.980	0.000	2835.540	-0.020	0.000
79.	3911.047	-11.580	0.000	2502.320	26.560	0.000	2835.527	-0.020	0.000
80.	3897.443	-11.050	0.000	2523.623	24.970	0.000	2835.515	-0.020	0.000
81.	3884.527	-10.420	0.000	2543.294	23.220	0.000	2835.504	-0.010	0.000
82.	3872.519	-9.660	0.000	2561.941	21.290	0.000	2835.493	-0.010	0.000
83.	3861.520	-8.810	0.000	2578.091	19.160	0.000	2835.484	-0.010	0.000
84.	3851.661	-7.830	0.000	2592.796	16.890	0.000	2835.476	-0.010	0.000
85.	3843.067	-6.740	0.000	2605.820	14.410	0.000	2835.469	-0.010	0.000
86.	3835.853	-5.530	0.000	2616.128	11.770	0.000	2835.463	0.000	0.000
87.	3830.125	-4.240	0.000	2624.507	8.870	0.000	2835.454	0.000	0.000
88.	3825.960	-2.870	0.000	2630.964	6.050	0.000	2835.456	-0.000	0.000
89.	3823.446	-1.450	0.000	2634.227	3.050	0.000	2835.454	0.000	0.000
90.	3822.601	0.000	0.000	2635.453	-0.000	0.000	2835.453	0.000	0.000
91.	3823.446	1.450	0.000	2634.227	-3.050	0.000	2835.454	0.000	0.000
92.	3825.968	2.870	0.000	2630.964	-6.050	0.000	2835.456	0.000	0.000
93.	3830.125	4.240	0.000	2624.507	-8.870	0.000	2835.459	0.000	0.000
94.	3835.853	5.530	0.000	2616.128	-11.770	0.000	2835.463	-0.000	0.000
95.	3843.067	6.740	0.000	2605.820	-14.410	0.000	2835.469	-0.010	0.000
96.	3851.661	7.830	0.000	2592.796	-16.890	0.000	2835.476	-0.010	0.000
97.	3861.520	8.810	0.000	2578.091	-19.160	0.000	2835.484	-0.010	0.000
98.	3872.519	9.660	0.000	2561.941	-21.290	0.000	2835.493	-0.010	0.000
99.	3884.527	10.420	0.000	2543.294	-23.220	0.000	2835.504	-0.010	0.000

BULK

Z-PLANE (XY-PLANE) INDIUM ARSENIDE									
	LNQVEL	LPMI12	LPMI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
100.	3897.413	11.050	0.000	2523.503	-24.470	0.000	2635.515	.010	0.000
101.	3911.047	11.560	0.000	2502.320	-26.560	0.000	2635.527	.020	0.000
102.	3925.304	11.970	0.000	2479.896	-27.960	0.000	2635.540	.020	0.000
103.	3940.063	12.260	0.000	2456.380	-29.250	0.000	2635.554	.020	0.000
104.	3955.210	12.500	0.000	2431.915	-30.390	0.000	2635.569	.020	0.000
105.	3970.636	12.630	0.000	2406.643	-31.390	0.000	2635.585	.020	0.000
106.	3986.247	12.650	0.000	2380.699	-32.270	0.000	2635.601	.020	0.000
107.	4001.947	12.680	0.000	2354.212	-33.030	0.000	2635.618	.020	0.000
108.	4017.651	12.600	0.000	2327.311	-33.660	0.000	2635.635	.020	0.000
109.	4033.282	12.470	0.000	2300.116	-34.220	0.000	2635.653	.020	0.000
110.	4048.767	12.250	0.000	2272.747	-34.650	0.000	2635.671	.020	0.000
111.	4064.043	12.060	0.000	2245.317	-34.960	0.000	2635.689	.020	0.000
112.	4079.042	11.780	0.000	2217.940	-35.210	0.000	2635.707	.020	0.000
113.	4093.729	11.470	0.000	2190.725	-35.330	0.000	2635.726	.020	0.000
114.	4108.036	11.130	0.000	2163.776	-35.340	0.000	2635.744	.020	0.000
115.	4121.923	10.750	0.000	2137.205	-35.240	0.000	2635.762	.020	0.000
116.	4135.349	10.350	0.000	2111.110	-35.020	0.000	2635.780	.020	0.000
117.	4148.276	9.920	0.000	2085.593	-34.690	0.000	2635.798	.020	0.000
118.	4160.671	9.470	0.000	2060.755	-34.220	0.000	2635.815	.020	0.000
119.	4172.502	9.000	0.000	2036.694	-33.630	0.000	2635.832	.020	0.000
120.	4183.741	8.520	0.000	2013.587	-32.860	0.000	2635.848	.020	0.000
121.	4194.361	8.010	0.000	1991.288	-31.960	0.000	2635.864	.020	0.000
122.	4204.341	7.490	0.000	1970.130	-30.920	0.000	2635.879	.020	0.000
123.	4213.659	6.960	0.000	1950.121	-29.690	0.000	2635.893	.020	0.000
124.	4222.296	6.420	0.000	1931.350	-28.270	0.000	2635.906	.020	0.000
125.	4230.235	5.870	0.000	1913.459	-26.560	0.000	2635.916	.010	0.000
126.	4237.461	5.310	0.000	1897.846	-24.630	0.000	2635.930	.010	0.000
127.	4243.961	4.730	0.000	1883.267	-22.800	0.000	2635.940	.010	0.000
128.	4249.722	4.160	0.000	1870.225	-20.560	0.000	2635.949	.010	0.000
129.	4254.736	3.570	0.000	1858.795	-18.110	0.000	2635.957	.010	0.000
130.	4258.992	2.940	0.000	1849.021	-15.460	0.000	2635.964	.010	0.000
131.	4262.465	2.300	0.000	1840.955	-12.630	0.000	2635.970	.010	0.000
132.	4265.207	1.600	0.000	1834.635	-9.820	0.000	2635.974	.000	0.000
133.	4267.155	1.200	0.000	1830.104	-6.490	0.000	2635.977	.000	0.000
134.	4268.325	.600	0.000	1827.374	-3.270	0.000	2635.979	.000	0.000
135.	4268.715	-0.000	0.000	1826.462	0.000	0.000	2635.980	.000	0.000
136.	4268.325	-600	0.000	1827.374	3.270	0.000	2635.979	.000	0.000
137.	4267.155	-1.200	0.000	1830.104	6.490	0.000	2635.977	.000	0.000
138.	4265.207	-1.800	0.000	1834.639	9.820	0.000	2635.974	.000	0.000
139.	4262.465	-2.390	0.000	1840.955	12.630	0.000	2635.970	.000	0.000
140.	4258.992	-2.960	0.000	1849.021	15.460	0.000	2635.964	.000	0.000
141.	4254.736	-3.570	0.000	1858.795	18.110	0.000	2635.957	.000	0.000
142.	4249.722	-4.160	0.000	1870.229	20.560	0.000	2635.949	.000	0.000
143.	4243.961	-4.730	0.000	1883.267	22.800	0.000	2635.940	.000	0.000
144.	4237.461	-5.300	0.000	1897.846	24.630	0.000	2635.930	.000	0.000
145.	4230.235	-5.870	0.000	1913.459	26.560	0.000	2635.916	.000	0.000
146.	4222.296	-6.420	0.000	1931.350	28.270	0.000	2635.893	.000	0.000
147.	4213.659	-6.960	0.000	1950.121	29.690	0.000	2635.879	.000	0.000
148.	4204.341	-7.490	0.000	1970.130	30.920	0.000	2635.864	.000	0.000
149.	4194.361	-8.010	0.000	1991.288	31.960	0.000	2635.848	.000	0.000

Z-PLANE (XY-PLANE) INDIUM ARSENIDE									
	LPM12	LPM13	FSRVEL	FSPMI12	FSPMI13	BULK	SSPMI12	SSPMI13	
150.	4183.741	0.000	2013.507	32.460	0.000	2635.046	-0.020	0.000	
151.	4172.502	0.000	2036.694	33.630	0.000	2635.832	-0.020	0.000	
152.	4160.671	0.000	2060.755	34.220	0.000	2635.815	-0.020	0.000	
153.	4148.276	0.000	2085.593	34.690	0.000	2635.796	-0.020	0.000	
154.	4135.345	0.000	2111.110	35.020	0.000	2635.780	-0.020	0.000	
155.	4121.923	0.000	2137.205	35.240	0.000	2635.762	-0.020	0.000	
156.	4108.036	0.000	2163.778	35.340	0.000	2635.744	-0.020	0.000	
157.	4093.729	0.000	2190.725	35.330	0.000	2635.726	-0.020	0.000	
158.	4079.046	0.000	2217.940	35.210	0.000	2635.707	-0.020	0.000	
159.	4064.043	0.000	2245.317	34.560	0.000	2635.689	-0.020	0.000	
160.	4048.767	0.000	2272.747	34.650	0.000	2635.671	-0.020	0.000	
161.	4033.282	0.000	2300.116	34.220	0.000	2635.653	-0.020	0.000	
162.	4017.651	0.000	2327.311	33.660	0.000	2635.635	-0.020	0.000	
163.	4001.947	0.000	2354.212	33.030	0.000	2635.616	-0.020	0.000	
164.	3986.247	0.000	2380.695	32.270	0.000	2635.601	-0.020	0.000	
165.	3970.638	0.000	2406.843	31.390	0.000	2635.585	-0.020	0.000	
166.	3955.210	0.000	2431.915	30.390	0.000	2635.569	-0.020	0.000	
167.	3940.063	0.000	2456.386	29.250	0.000	2635.554	-0.020	0.000	
168.	3925.304	0.000	2479.896	27.960	0.000	2635.540	-0.020	0.000	
169.	3911.047	0.000	2502.320	26.560	0.000	2635.527	-0.020	0.000	
170.	3897.413	0.000	2523.503	24.970	0.000	2635.515	-0.010	0.000	
171.	3884.527	0.000	2543.294	23.220	0.000	2635.504	-0.010	0.000	
172.	3872.519	0.000	2561.541	21.290	0.000	2635.493	-0.010	0.000	
173.	3861.520	0.000	2578.091	19.180	0.000	2635.484	-0.010	0.000	
174.	3851.661	0.000	2592.796	16.690	0.000	2635.476	-0.010	0.000	
175.	3843.067	0.000	2605.520	14.410	0.000	2635.469	-0.010	0.000	
176.	3835.863	0.000	2616.126	11.770	0.000	2635.463	0.000	0.000	
177.	3830.125	0.000	2624.507	8.970	0.000	2635.459	0.000	0.000	
178.	3825.968	0.000	2630.564	6.050	0.000	2635.456	-0.000	0.000	
179.	3823.446	0.000	2634.227	3.050	0.000	2635.454	0.000	0.000	
180.	3822.601	0.000	2635.453	-0.000	0.000	2635.453	0.000	0.000	

111-PLANE INDIUM ARSENIDE

BULK

	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
0.	4268.715	0.000	2635.980	0.000	0.000	1826.462	0.000	-3.000
1.	4268.785	-0.110	2635.517	-1.150	-1.610	1826.967	1.610	-1.030
2.	4268.994	.210	2634.131	-2.300	-1.620	1826.476	3.610	-2.000
3.	4269.338	.310	2631.828	-3.440	-2.430	1833.986	5.370	-3.000
4.	4269.815	.420	2628.616	-4.560	-3.230	1834.484	7.090	-4.080
5.	4270.418	.510	2624.516	-5.660	-4.020	1836.949	8.750	-5.010
6.	4271.140	.600	2619.539	-6.740	-4.800	1844.360	10.340	-6.000
7.	4271.972	.680	2613.711	-7.800	-5.570	1854.689	11.850	-6.910
8.	4272.905	.750	2607.059	-8.840	-6.320	1867.905	13.270	-7.790
9.	4273.927	.820	2599.613	-9.790	-7.060	1885.969	14.580	-8.620
10.	4275.027	.870	2591.409	-10.730	-7.770	1874.040	15.800	-9.410
11.	4276.192	.920	2582.487	-11.620	-8.470	1884.489	16.890	-10.150
12.	4277.409	.950	2572.893	-12.450	-9.150	1894.603	17.870	-10.850
13.	4278.663	.970	2562.678	-13.220	-9.800	1905.763	18.730	-11.500
14.	4279.941	.990	2551.896	-13.920	-10.440	1917.345	19.470	-12.090
15.	4281.226	.950	2540.616	-14.550	-11.050	1929.415	20.000	-12.630
16.	4282.510	.960	2528.905	-15.090	-11.630	1941.915	20.520	-13.120
17.	4283.774	.960	2516.844	-15.530	-12.200	1954.753	20.820	-13.560
18.	4285.006	.930	2504.526	-15.850	-12.730	1967.831	20.970	-13.940
19.	4286.192	.890	2492.056	-16.040	-13.240	1981.035	20.950	-14.250
20.	4287.321	.840	2479.555	-16.080	-13.720	1994.284	20.700	-14.500
21.	4288.380	.780	2467.163	-15.920	-14.180	2007.609	20.240	-14.690
22.	4289.358	.720	2455.046	-15.540	-14.610	2021.035	19.530	-14.830
23.	4290.246	.640	2443.394	-14.900	-15.000	2034.670	18.500	-14.910
24.	4291.035	.560	2432.430	-13.940	-15.360	2048.417	17.140	-14.930
25.	4291.716	.480	2422.402	-12.610	-15.680	2062.269	15.360	-14.890
26.	4292.283	.390	2413.610	-10.870	-15.960	2076.224	13.140	-14.700
27.	4292.725	.290	2406.335	-8.660	-16.150	2090.284	10.430	-14.360
28.	4293.051	.200	2400.875	-6.060	-16.360	2104.466	7.270	-13.800
29.	4293.246	.100	2397.482	-3.130	-16.470	2118.801	3.740	-13.130
30.	4293.311	0.000	2396.330	0.000	-16.510	2133.317	0.000	-12.380
31.	4293.246	-0.000	2397.482	3.130	-16.470	2148.001	-3.740	-11.500
32.	4293.051	-0.100	2400.875	6.060	-16.360	2162.969	-7.270	-10.430
33.	4292.725	-0.290	2406.335	8.660	-16.150	2178.224	-10.430	-9.140
34.	4292.283	-0.390	2413.610	10.870	-15.960	2193.801	-13.140	-7.700
35.	4291.716	-0.480	2422.402	12.610	-15.680	2209.724	-15.360	-6.100
36.	4291.035	-0.560	2432.430	13.940	-15.360	2226.001	-17.140	-4.300
37.	4290.246	-0.640	2443.394	14.900	-15.000	2242.670	-18.500	-2.300
38.	4289.358	-0.720	2455.046	15.540	-14.610	2259.724	-19.530	-0.100
39.	4288.380	-0.780	2467.163	15.920	-14.180	2277.269	-20.240	2.100
40.	4287.321	-0.840	2479.555	16.080	-13.720	2295.284	-20.700	4.200
41.	4286.192	-0.890	2492.056	16.040	-13.240	2313.801	-20.950	6.200
42.	4285.006	-0.930	2504.526	15.850	-12.730	2332.831	-20.970	8.100
43.	4283.774	-0.960	2516.844	15.530	-12.200	2352.345	-20.820	9.800
44.	4282.510	-0.980	2528.905	15.090	-11.630	2372.345	-20.520	11.300
45.	4281.226	-0.950	2540.616	14.550	-11.050	2392.801	-20.060	12.600
46.	4279.941	-0.900	2551.896	13.920	-10.440	2413.801	-19.470	13.700
47.	4278.663	-0.970	2562.678	13.220	-9.800	2435.345	-18.730	14.600
48.	4277.409	-0.950	2572.893	12.450	-9.150	2457.603	-17.870	15.300
49.	4276.192	-0.920	2582.487	11.620	-8.470	2480.469	-16.890	15.800

111-PLANE INDIUM ARSENIIDE

BULK

	LNVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
50.	4275.027	-670	4.690	2591.409	10.730	-7.770	1074.860	-15.600	-3.410
51.	4273.927	-620	4.260	2599.613	9.750	-7.060	1062.969	-14.500	-3.020
52.	4272.905	-750	3.840	2607.059	8.810	-6.320	1057.905	-13.270	-2.790
53.	4271.972	-680	3.390	2613.711	7.600	-5.570	1050.689	-11.650	-2.410
54.	4271.140	-600	2.930	2619.519	6.740	-4.600	1044.360	-10.340	-2.000
55.	4270.416	-510	2.460	2624.516	5.660	-3.620	1036.949	-8.750	-1.500
56.	4269.815	-420	1.980	2628.616	4.560	-2.530	1028.484	-7.090	-1.000
57.	4269.338	-310	1.490	2631.828	3.440	-1.430	1020.988	-5.370	-0.500
58.	4268.994	-210	1.000	2634.131	2.300	-0.320	1012.470	-3.610	-0.000
59.	4268.765	-110	.500	2635.517	1.150	-0.210	1003.867	-1.810	-0.500
60.	4268.713	0.000	0.000	2635.980	-0.000	0.000	1000.482	-0.000	-0.600
61.	4268.765	.110	-.500	2635.517	-1.150	.810	1000.482	1.810	1.030
62.	4268.994	.210	-1.000	2634.131	-2.300	1.620	1000.482	3.610	2.060
63.	4269.338	.310	-1.490	2631.828	-3.440	2.430	1000.482	5.370	3.000
64.	4269.815	.420	-1.980	2628.616	-4.560	3.230	1000.482	7.090	4.000
65.	4270.416	.510	-2.460	2624.516	-5.660	4.020	1000.482	8.750	5.000
66.	4271.140	.600	-2.930	2619.519	-6.740	4.800	1000.482	10.340	6.000
67.	4271.972	.680	-3.390	2613.711	-7.600	5.570	1000.482	11.650	7.000
68.	4272.905	.750	-3.840	2607.059	-8.810	6.320	1000.482	13.270	8.000
69.	4273.927	.820	-4.260	2599.613	-9.750	7.060	1000.482	14.500	9.000
70.	4275.027	.870	-4.690	2591.409	-10.730	7.770	1000.482	15.600	10.000
71.	4276.192	.920	-5.100	2582.407	-11.620	8.470	1000.482	16.690	11.000
72.	4277.409	.950	-5.480	2572.693	-12.450	9.150	1000.482	17.670	12.000
73.	4278.663	.970	-5.850	2562.678	-13.220	9.800	1000.482	18.650	13.000
74.	4279.941	.990	-6.200	2551.898	-13.920	10.440	1000.482	19.620	14.000
75.	4281.228	.990	-6.520	2540.616	-14.550	11.050	1000.482	20.060	15.000
76.	4282.510	.960	-6.830	2528.904	-15.090	11.630	1000.482	20.520	16.000
77.	4283.774	.960	-7.120	2516.844	-15.530	12.200	1000.482	20.820	17.000
78.	4285.006	.930	-7.390	2504.526	-15.850	12.730	1000.482	20.970	18.000
79.	4286.192	.890	-7.630	2492.056	-16.040	13.240	1000.482	20.930	19.000
80.	4287.321	.840	-7.860	2479.554	-16.080	13.720	1000.482	20.700	20.000
81.	4288.360	.780	-8.060	2467.163	-15.920	14.180	1000.482	20.260	21.000
82.	4289.355	.720	-8.240	2455.046	-15.540	14.610	1000.482	19.520	22.000
83.	4290.247	.640	-8.400	2443.394	-14.900	15.000	1000.482	18.500	23.000
84.	4291.035	.560	-8.540	2432.430	-14.040	15.360	1000.482	17.140	24.000
85.	4291.716	.480	-8.660	2422.406	-12.610	15.680	1000.482	15.360	25.000
86.	4292.263	.390	-8.760	2413.610	-10.670	15.960	1000.482	13.140	26.000
87.	4292.729	.290	-8.830	2406.335	-8.680	16.190	1000.482	10.430	27.000
88.	4293.052	.200	-8.890	2400.874	-6.080	16.360	1000.482	7.270	28.000
89.	4293.246	.100	-8.920	2397.462	-3.130	16.470	1000.482	3.740	29.000
90.	4293.311	-.000	-8.930	2396.330	0.000	16.510	1000.482	-0.000	30.000
91.	4293.246	-.100	-8.920	2397.462	3.130	16.470	1000.482	-3.740	31.000
92.	4293.052	-.200	-8.890	2400.874	6.080	16.360	1000.482	-7.270	32.000
93.	4292.729	-.290	-8.830	2406.335	8.680	16.190	1000.482	-10.430	33.000
94.	4292.263	-.390	-8.760	2413.610	10.670	15.960	1000.482	-13.140	34.000
95.	4291.716	-.480	-8.660	2422.406	12.610	15.680	1000.482	-15.360	35.000
96.	4291.035	-.560	-8.540	2432.430	14.040	15.360	1000.482	-17.140	36.000
97.	4290.247	-.640	-8.400	2443.394	15.900	15.000	1000.482	-18.500	37.000
98.	4289.355	-.720	-8.240	2455.046	18.540	14.610	1000.482	-19.520	38.000
99.	4288.360	-.780	-8.060	2467.163	21.040	14.180	1000.482	-20.260	39.000

111-PLANE INDIUM ARSENIIDE

BULK

	LNGLVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SRVEL	SSPH12	SSPH13
100.	4287.321	-640	-7.060	2475.534	16.000	13.720	1994.235	-20.700	14.500
101.	4286.192	-690	-7.630	2492.056	16.040	13.240	1981.035	-20.930	14.200
102.	4285.006	-930	-7.390	2504.526	15.850	12.730	1967.031	-20.970	13.940
103.	4283.774	-960	-7.120	2516.844	15.530	12.200	1954.733	-20.920	13.690
104.	4282.510	-990	-6.830	2528.984	15.090	11.630	1941.914	-20.820	13.450
105.	4281.226	-990	-6.520	2540.616	14.550	11.050	1929.415	-20.660	13.120
106.	4279.941	-990	-6.200	2551.890	13.920	10.440	1917.345	-20.050	12.850
107.	4278.663	-970	-5.850	2562.678	13.220	9.800	1905.703	-19.470	12.500
108.	4277.409	-950	-5.480	2572.893	12.450	9.150	1894.469	-18.730	12.140
109.	4276.192	-920	-5.100	2582.447	11.620	8.470	1884.469	-17.670	11.800
110.	4275.028	-870	-4.690	2591.409	10.730	7.770	1874.940	-16.890	11.450
111.	4273.926	-820	-4.260	2599.613	9.790	7.060	1865.369	-15.560	11.100
112.	4272.905	-750	-3.840	2607.099	8.810	6.320	1857.905	-14.500	10.750
113.	4271.972	-680	-3.390	2613.711	7.800	5.570	1850.669	-13.270	10.400
114.	4271.140	-600	-2.930	2619.539	6.740	4.800	1844.360	-11.650	10.050
115.	4270.416	-510	-2.460	2624.516	5.660	4.020	1838.349	-10.340	9.700
116.	4269.815	-420	-1.990	2628.610	4.560	3.230	1834.334	-8.750	9.350
117.	4269.336	-310	-1.490	2631.828	3.440	2.430	1830.360	-7.060	9.000
118.	4268.984	-210	-1.000	2634.131	2.300	1.620	1828.478	-5.370	8.650
119.	4268.765	-110	-0.500	2635.517	1.150	0.810	1826.662	-3.610	8.300
120.	4268.715	-0.000	0.000	2635.980	0.000	0.000	1826.462	-1.610	8.000
121.	4268.765	110	0.500	2635.517	-1.150	-0.810	1826.367	1.610	7.650
122.	4268.994	210	1.000	2634.131	-2.300	-1.620	1826.470	3.610	7.300
123.	4269.338	310	1.490	2631.828	-3.440	-2.430	1830.360	5.370	6.950
124.	4269.815	420	1.990	2628.610	-4.560	-3.230	1834.334	7.060	6.600
125.	4270.416	510	2.460	2624.516	-5.660	-4.020	1838.349	8.750	6.250
126.	4271.140	600	2.930	2619.539	-6.740	-4.800	1844.360	10.340	5.900
127.	4271.972	680	3.390	2613.711	-7.800	-5.570	1850.669	11.650	5.550
128.	4272.905	750	3.840	2607.099	-8.810	-6.320	1857.905	13.270	5.200
129.	4273.927	820	4.260	2599.613	-9.790	-7.060	1865.369	14.560	4.850
130.	4275.027	870	4.690	2591.409	-10.730	-7.770	1874.940	15.560	4.500
131.	4276.192	920	5.100	2582.447	-11.620	-8.470	1884.469	16.890	4.150
132.	4277.409	950	5.480	2572.893	-12.450	-9.150	1894.469	17.670	3.800
133.	4278.663	970	5.850	2562.678	-13.220	-9.800	1905.703	18.730	3.450
134.	4279.941	990	6.200	2551.890	-13.920	-10.440	1917.345	19.470	3.100
135.	4281.228	990	6.520	2540.616	-14.550	-11.050	1929.415	20.050	2.750
136.	4282.510	980	6.830	2528.984	-15.090	-11.630	1941.915	20.520	2.400
137.	4283.774	960	7.120	2516.844	-15.530	-12.200	1954.733	20.920	2.050
138.	4285.006	930	7.390	2504.526	-15.850	-12.730	1967.031	20.970	1.700
139.	4286.192	890	7.630	2492.056	-16.040	-13.240	1981.035	20.930	1.350
140.	4287.321	840	7.960	2479.555	-16.080	-13.720	1994.235	20.700	1.000
141.	4288.300	780	8.290	2467.163	-15.920	-14.180	2007.264	20.240	0.650
142.	4289.356	720	8.600	2455.046	-15.540	-14.610	2020.010	20.240	0.300
143.	4290.286	640	8.900	2443.394	-14.900	-15.000	2032.214	19.520	0.000
144.	4291.035	560	9.190	2432.430	-13.940	-15.360	2043.670	18.500	-0.350
145.	4291.716	480	9.480	2422.408	-12.610	-15.660	2054.117	17.140	-0.700
146.	4292.283	390	9.760	2413.610	-10.670	-15.960	2063.269	15.300	-1.050
147.	4292.729	290	10.030	2406.335	-8.660	-16.150	2070.824	13.140	-1.400
148.	4293.051	200	10.290	2400.875	-6.600	-16.360	2076.466	10.430	-1.750
149.	4293.266	100	10.540	2397.462	-3.130	-16.470	2080.001	7.270	-2.100

111-PLANE INDIUM ARSENIIDE

BULK

	LMVEL	LPMI12	LPMI13	FSRVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13
150.	4293.311	0.000	8.930	2396.330	-0.000	-16.510	2081.193	-0.000	-10.300
151.	4293.246	-1.100	8.920	2397.462	3.130	-16.470	2080.001	-3.740	-10.300
152.	4293.051	-2.200	8.890	2400.875	6.060	-16.360	2076.406	-7.270	-10.300
153.	4292.729	-3.290	8.830	2406.335	8.660	-16.150	2070.024	-10.430	-10.300
154.	4292.283	-4.350	8.760	2413.610	10.870	-15.960	2063.269	-13.140	-10.300
155.	4291.716	-5.460	8.660	2422.401	12.610	-15.660	2054.117	-15.360	-10.320
156.	4291.035	-6.560	8.540	2432.430	13.940	-15.360	2043.670	-17.140	-10.240
157.	4290.246	-7.640	8.400	2443.394	14.900	-15.000	2032.214	-18.500	-10.140
158.	4289.356	-8.720	8.240	2455.046	15.540	-14.610	2020.010	-19.520	-10.000
159.	4288.360	-9.760	8.060	2467.163	15.920	-14.160	2007.264	-20.240	-10.000
160.	4287.321	-10.640	7.860	2479.555	16.060	-13.720	1994.235	-20.700	-10.000
161.	4286.192	-11.450	7.630	2492.056	16.040	-13.240	1981.035	-20.530	-10.000
162.	4285.006	-12.190	7.390	2504.526	15.850	-12.730	1967.831	-20.970	-10.000
163.	4283.774	-12.860	7.120	2516.844	15.530	-12.200	1954.753	-20.620	-10.000
164.	4282.510	-13.460	6.830	2528.905	15.090	-11.630	1941.915	-20.520	-10.000
165.	4281.222	-14.000	6.520	2540.616	14.550	-11.030	1929.415	-20.060	-10.000
166.	4279.941	-14.490	6.200	2551.896	13.920	-10.440	1917.345	-19.470	-10.000
167.	4278.663	-14.930	5.850	2562.678	13.220	-9.860	1905.783	-18.730	-10.000
168.	4277.405	-15.320	5.480	2572.893	12.450	-9.150	1894.803	-17.870	-10.000
169.	4276.192	-15.670	5.100	2582.407	11.620	-8.470	1884.469	-16.890	-10.000
170.	4275.027	-15.980	4.690	2591.409	10.730	-7.770	1874.840	-15.800	-10.000
171.	4273.827	-16.250	4.280	2599.613	9.790	-7.060	1865.969	-14.580	-10.000
172.	4272.605	-16.490	3.840	2607.059	8.810	-6.320	1857.905	-13.270	-10.000
173.	4271.372	-16.690	3.390	2613.711	7.800	-5.570	1850.609	-11.860	-10.000
174.	4270.140	-16.850	2.930	2619.539	6.740	-4.800	1844.360	-10.340	-10.000
175.	4268.915	-16.980	2.460	2624.516	5.660	-4.020	1838.949	-8.750	-10.000
176.	4267.694	-17.080	1.980	2628.616	4.560	-3.230	1834.404	-7.090	-10.000
177.	4266.474	-17.150	1.490	2631.826	3.440	-2.430	1830.900	-5.370	-10.000
178.	4265.254	-17.190	1.000	2634.131	2.300	-1.620	1828.476	-3.610	-10.000
179.	4264.034	-17.200	.500	2635.517	1.150	-0.810	1826.967	-1.810	-10.000
180.	4262.814	-17.190	-0.000	2635.980	-0.000	-0.000	1826.462	0.000	-10.000

110-PLANE INDIUM ARSENIDE

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
0.	4407.817	0.000	-0.000	2130.541	-20.550	0.000	2130.530	20.550	0.000
1.	4407.535	-0.420	-0.000	2117.057	-19.410	-0.000	2144.507	20.520	0.000
2.	4406.602	-0.650	-0.000	2104.520	-18.140	-0.000	2158.546	20.470	0.000
3.	4405.244	-1.290	-0.000	2093.010	-16.750	-0.000	2172.630	20.400	0.000
4.	4403.214	-1.740	-0.000	2082.559	-15.240	-0.000	2186.740	20.300	0.000
5.	4400.580	-2.150	-0.000	2073.227	-13.600	-0.000	2200.058	20.180	0.000
6.	4397.336	-2.650	-0.000	2065.054	-11.860	-0.000	2214.769	20.040	0.000
7.	4393.477	-3.110	0.000	2058.059	-10.020	-0.000	2229.054	19.880	0.000
8.	4388.996	-3.560	-0.000	2052.364	-8.060	-0.000	2243.036	19.700	0.000
9.	4383.692	-4.010	-0.000	2047.944	-6.060	-0.000	2257.064	19.500	0.000
10.	4378.162	-4.520	-0.000	2044.008	-3.970	-0.000	2270.756	19.290	0.000
11.	4371.806	-5.000	-0.000	2042.995	-1.840	-0.000	2284.819	19.050	0.000
12.	4364.824	-5.470	-0.000	2042.520	0.320	-0.000	2298.537	18.610	0.000
13.	4357.215	-5.940	-0.000	2043.393	2.440	-0.000	2312.137	18.040	0.000
14.	4348.995	-6.410	-0.000	2045.615	4.640	-0.000	2325.604	17.260	0.000
15.	4340.155	-6.860	0.000	2049.182	6.760	-0.000	2338.923	17.970	0.000
16.	4330.707	-7.350	0.000	2054.085	8.830	-0.000	2352.061	17.060	0.000
17.	4320.659	-7.810	-0.000	2060.308	10.820	-0.000	2365.066	17.350	0.000
18.	4310.020	-8.270	-0.000	2067.826	12.740	-0.000	2377.963	17.010	0.000
19.	4298.800	-8.720	-0.000	2076.617	14.560	-0.000	2390.661	16.670	0.000
20.	4287.013	-9.160	-0.000	2086.642	16.270	-0.000	2402.848	16.320	0.000
21.	4274.673	-9.590	-0.000	2097.683	17.670	-0.000	2415.012	15.950	0.000
22.	4261.796	-10.020	-0.000	2110.236	19.350	-0.000	2426.741	15.560	0.000
23.	4248.400	-10.430	-0.000	2123.711	20.700	-0.000	2438.024	15.150	0.000
24.	4234.506	-10.830	-0.000	2136.235	21.930	-0.000	2450.051	14.800	0.000
25.	4220.135	-11.210	0.000	2148.746	23.040	-0.000	2461.213	14.390	0.000
26.	4205.312	-11.560	-0.000	2161.167	24.020	-0.000	2472.037	13.960	0.000
27.	4190.065	-11.930	-0.000	2170.487	24.860	-0.000	2482.696	13.560	0.000
28.	4174.422	-12.260	-0.000	2205.575	25.620	-0.000	2493.000	13.140	0.000
29.	4158.416	-12.560	-0.000	2224.378	26.240	-0.000	2503.000	12.700	0.000
30.	4142.086	-12.840	-0.000	2243.816	26.740	-0.000	2512.680	12.260	0.000
31.	4125.467	-13.090	-0.000	2263.612	27.130	-0.000	2522.055	11.810	0.000
32.	4108.604	-13.310	0.000	2284.277	27.400	-0.000	2531.944	11.360	0.000
33.	4091.562	-13.560	0.000	2305.122	27.570	-0.000	2539.797	10.900	0.000
34.	4074.333	-13.650	0.000	2326.257	27.620	-0.000	2546.156	10.430	0.000
35.	4057.033	-13.750	-0.000	2347.565	27.570	-0.000	2556.160	9.960	0.000
36.	4039.701	-13.810	0.000	2369.006	27.400	-0.000	2563.923	9.480	0.000
37.	4022.404	-13.810	-0.000	2390.617	27.120	-0.000	2571.116	9.000	0.000
38.	4005.213	-13.760	0.000	2411.710	26.730	-0.000	2576.041	8.520	0.000
39.	3988.206	-13.640	0.000	2432.772	26.220	-0.000	2584.542	8.030	0.000
40.	3971.465	-13.450	0.000	2453.486	25.560	-0.000	2590.555	7.540	0.000
41.	3955.081	-13.190	0.000	2473.732	24.820	-0.000	2596.555	7.040	0.000
42.	3939.145	-12.840	0.000	2493.363	23.930	-0.000	2601.956	6.540	0.000
43.	3923.771	-12.410	0.000	2512.310	22.500	-0.000	2606.966	6.040	0.000
44.	3908.056	-11.870	0.000	2530.376	21.720	-0.000	2611.561	5.530	0.000
45.	3895.115	-11.240	0.000	2547.452	20.400	-0.000	2615.796	5.020	0.000
46.	3882.064	-10.510	0.000	2563.395	18.910	-0.000	2619.608	4.510	0.000
47.	3870.022	-9.660	0.000	2578.067	17.270	-0.000	2623.015	4.000	0.000
48.	3859.105	-8.710	0.000	2591.335	15.470	-0.000	2626.015	3.490	0.000
49.	3849.429	-7.650	0.000	2603.067	13.520	-0.000	2628.004	2.970	0.000

110-PLANE INDIUM ARSENIIDE

	LNGLVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
50.	3641.102	-6.480	0.000	2613.162	11.410	-0.000	2630.791	2.460	0.000
51.	3634.224	-5.230	0.000	2621.449	9.170	-0.000	2632.544	1.940	-0.000
52.	3628.061	-3.900	0.000	2627.092	6.820	0.000	2633.692	1.420	0.000
53.	3625.142	-2.500	0.000	2632.395	4.370	0.000	2634.425	.900	0.000
54.	3623.059	-1.070	0.000	2634.902	1.870	0.000	2635.380	.360	0.000
55.	3622.660	.360	0.000	2635.439	-.140	-0.000	2635.382	-.670	-0.000
56.	3623.951	1.830	0.000	2633.029	-3.200	-0.000	2635.120	-.660	-0.000
57.	3626.913	3.240	0.000	2630.263	-5.660	0.000	2634.364	-1.180	-0.000
58.	3631.506	4.610	0.000	2624.727	-8.080	-0.000	2633.232	-1.700	-0.000
59.	3637.670	5.900	0.000	2617.259	-10.370	-0.000	2631.665	-2.210	-0.000
60.	3645.324	7.110	0.000	2608.036	-12.540	-0.000	2629.663	-2.730	-0.000
61.	3654.376	8.220	0.000	2597.071	-14.570	-0.000	2627.268	-3.250	0.000
62.	3664.722	9.220	0.000	2584.513	-16.440	-0.000	2624.462	-3.760	0.000
63.	3676.247	10.120	0.000	2570.467	-18.160	-0.000	2621.267	-4.270	-0.000
64.	3686.037	10.910	0.000	2555.127	-19.720	-0.000	2617.645	-4.760	-0.000
65.	3902.372	11.590	0.000	2538.570	-21.120	-0.000	2613.620	-5.250	0.000
66.	3916.736	12.170	0.000	2520.953	-22.360	-0.000	2609.194	-5.630	0.000
67.	3931.615	12.650	0.000	2502.415	-23.460	-0.000	2604.370	-6.000	0.000
68.	3947.456	13.030	0.000	2483.009	-24.420	-0.000	2599.153	-6.840	0.000
69.	3963.682	13.340	0.000	2463.106	-25.240	-0.000	2593.546	-7.300	0.000
70.	3980.266	13.560	0.000	2442.599	-25.930	-0.000	2587.553	-7.600	0.000
71.	3997.154	13.710	0.000	2421.687	-26.500	-0.000	2581.100	-8.250	0.000
72.	4013.272	13.790	0.000	2400.469	-26.950	-0.000	2574.431	-8.770	0.000
73.	4031.529	13.810	0.000	2379.120	-27.260	-0.000	2567.311	-9.260	0.000
74.	4046.852	13.760	0.000	2357.690	-27.500	-0.000	2559.026	-9.740	0.000
75.	4066.175	13.700	0.000	2336.306	-27.610	-0.000	2551.963	-10.210	0.000
76.	4083.435	13.570	0.000	2315.067	-27.610	-0.000	2543.786	-10.660	0.000
77.	4100.572	13.410	0.000	2294.074	-27.500	-0.000	2535.244	-11.140	-0.000
78.	4117.536	13.200	-0.000	2273.416	-27.270	-0.000	2526.363	-11.600	0.000
79.	4134.275	12.970	0.000	2253.191	-26.940	-0.000	2517.150	-12.050	0.000
80.	4150.740	12.700	0.000	2233.479	-26.490	-0.000	2507.612	-12.490	0.000
81.	4166.911	12.410	0.000	2214.366	-25.920	-0.000	2497.758	-12.930	-0.000
82.	4182.729	12.090	0.000	2195.931	-25.240	-0.000	2487.597	-13.360	0.000
83.	4198.167	11.750	0.000	2178.250	-24.440	-0.000	2477.136	-13.790	0.000
84.	4213.193	11.390	0.000	2161.396	-23.520	-0.000	2466.365	-14.210	0.000
85.	4227.781	11.010	0.000	2145.437	-22.470	-0.000	2455.353	-14.610	-0.000
86.	4241.903	10.620	0.000	2130.439	-21.300	-0.000	2444.050	-15.010	0.000
87.	4255.537	10.210	0.000	2116.462	-20.000	-0.000	2432.466	-15.400	0.000
88.	4268.661	9.800	0.000	2103.562	-18.560	-0.000	2420.672	-15.780	0.000
89.	4281.257	9.370	0.000	2091.732	-17.060	-0.000	2408.618	-16.150	0.000
90.	4293.307	8.930	-0.000	2081.197	-15.360	-0.000	2396.335	-16.510	0.000
91.	4304.796	8.460	-0.000	2071.820	-13.610	-0.000	2383.835	-16.850	0.000
92.	4315.710	8.030	0.000	2063.697	-11.740	-0.000	2371.130	-17.190	0.000
93.	4326.039	7.570	-0.000	2056.059	-9.760	-0.000	2358.232	-17.520	0.000
94.	4335.771	7.100	0.000	2051.331	-7.740	-0.000	2345.154	-17.830	0.000
95.	4344.099	6.640	0.000	2047.411	-5.640	-0.000	2331.904	-18.130	0.000
96.	4353.414	6.170	0.000	2044.273	-3.500	-0.000	2318.551	-18.410	0.000
97.	4361.312	5.650	-0.000	2042.764	-1.340	-0.000	2304.972	-18.660	0.000
98.	4368.589	5.220	-0.000	2042.603	.620	-0.000	2291.306	-18.940	0.000
99.	4375.240	4.750	0.000	2043.786	2.970	-0.000	2277.532	-19.180	0.000

110-PLANE INDIUM ARSENIIDE

	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
100.	4381.266	0.000	2046.300	5.060	-0.000	2263.660	-19.400	0.000
101.	4386.665	3.600	2050.127	7.130	-0.000	2285.787	-19.610	0.000
102.	4391.439	3.330	2055.244	9.110	-0.000	2235.569	-19.600	0.000
103.	4395.592	2.670	2061.621	11.000	-0.000	2221.921	-19.970	0.000
104.	4399.125	2.410	2069.224	12.600	-0.000	2207.521	-20.120	0.000
105.	4402.046	1.950	2076.012	14.460	-0.000	2193.404	-20.250	0.000
106.	4404.360	1.500	2081.941	16.056	-0.000	2179.267	-20.350	0.000
107.	4406.077	1.060	2086.962	17.500	-0.000	2165.109	-20.440	0.000
108.	4407.204	.620	2111.021	18.830	0.000	2151.127	-20.500	0.000
109.	4407.754	.200	2124.062	20.030	-0.000	2137.110	-20.540	0.000
110.	4407.739	-.220	2138.024	21.100	-0.000	2123.162	-20.550	0.000
111.	4407.172	-.626	2152.844	22.060	-0.000	2109.336	-20.540	0.000
112.	4406.070	-1.020	2168.456	22.890	-0.000	2095.600	-20.500	0.000
113.	4404.450	-1.400	2184.792	23.650	0.000	2081.992	-20.430	0.000
114.	4402.329	-1.760	2201.780	24.230	0.000	2068.532	-20.330	0.000
115.	4399.730	-2.110	2219.365	24.720	-0.000	2055.240	-20.210	0.000
116.	4396.674	-2.450	2237.425	25.110	0.000	2042.135	-20.050	0.000
117.	4393.184	-2.760	2255.932	25.400	0.000	2029.236	-19.650	0.000
118.	4389.266	-3.060	2274.744	25.500	0.000	2016.564	-19.630	0.000
119.	4385.013	-3.330	2293.933	25.660	0.000	2004.138	-19.370	0.000
120.	4380.387	-3.580	2313.272	25.660	0.000	1991.979	-19.670	0.000
121.	4375.444	-3.810	2332.731	25.580	0.000	1980.105	-18.740	0.000
122.	4370.216	-4.020	2352.232	25.400	0.000	1968.536	-18.370	0.000
123.	4364.740	-4.200	2371.693	25.130	0.000	1957.246	-17.960	0.000
124.	4359.051	-4.350	2391.036	24.770	0.000	1946.400	-17.510	0.000
125.	4353.190	-4.470	2410.179	24.330	0.000	1935.867	-17.020	0.000
126.	4347.150	-4.550	2429.042	23.800	0.000	1925.716	-16.490	0.000
127.	4341.116	-4.610	2447.545	23.150	0.000	1915.970	-15.920	0.000
128.	4334.995	-4.630	2465.606	22.450	0.000	1906.642	-15.310	0.000
129.	4328.873	-4.620	2483.152	21.710	-0.000	1897.752	-14.660	0.000
130.	4322.801	-4.570	2500.097	20.850	-0.000	1889.316	-13.970	0.000
131.	4316.626	-4.490	2516.366	19.910	0.000	1881.351	-13.240	0.000
132.	4310.997	-4.360	2531.863	18.860	-0.000	1873.873	-12.460	0.000
133.	4305.364	-4.200	2546.573	17.760	-0.000	1866.897	-11.650	0.000
134.	4299.974	-4.000	2560.364	16.600	0.000	1860.437	-10.810	0.000
135.	4294.876	-3.770	2573.166	15.330	-0.000	1854.506	-9.920	0.000
136.	4290.116	-3.500	2584.973	14.000	-0.000	1849.117	-9.010	0.000
137.	4285.736	-3.190	2595.661	12.590	0.000	1844.260	-8.080	0.000
138.	4281.766	-2.850	2605.195	11.120	0.000	1840.007	-7.080	0.000
139.	4278.298	-2.490	2613.519	9.580	-0.000	1836.307	-6.080	0.000
140.	4275.309	-2.090	2620.569	8.000	0.000	1833.166	-5.050	0.000
141.	4272.849	-1.660	2626.362	6.360	-0.000	1830.653	-4.010	0.000
142.	4270.945	-1.240	2630.805	4.690	0.000	1828.713	-2.950	0.000
143.	4269.617	-.790	2633.892	2.990	0.000	1827.369	-1.870	0.000
144.	4268.876	-.340	2635.604	1.270	0.000	1826.625	-.000	0.000
145.	4268.736	.120	2635.931	-.460	0.000	1826.483	.290	0.000
146.	4269.194	.560	2636.872	-2.100	0.000	1826.943	1.370	0.000
147.	4270.245	1.030	2637.432	-3.890	0.000	1828.004	2.440	0.000
148.	4271.880	1.460	2628.626	-5.560	0.000	1829.663	3.510	0.000
149.	4274.080	1.900	2623.477	-7.230	0.000	1831.917	4.560	0.000

110-PLANE INDIUM ARSENIDE

	LMVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SRVEL	SSPH12	SSPH13
150.	4276.823	2.310	0.000	2617.015	-8.840	0.000	1634.761	5.599	0.000
151.	4280.860	2.660	0.000	2609.278	-10.400	0.000	1838.189	6.613	0.000
152.	4283.818	3.040	0.000	2600.309	-11.910	0.000	1242.193	7.600	-0.030
153.	4267.999	3.360	0.000	2598.158	-13.340	0.000	1846.764	8.560	0.000
154.	4292.584	3.640	0.000	2578.882	-14.710	0.000	1651.894	9.490	-0.060
155.	4297.526	3.960	0.000	2565.541	-16.010	0.000	1657.711	10.340	-0.000
156.	4302.787	4.110	0.000	2553.199	-17.230	0.000	1983.763	11.260	0.000
157.	4308.311	4.290	0.000	2538.925	-18.370	0.000	1670.517	12.090	-0.000
158.	4314.054	4.430	0.000	2523.765	-19.430	0.000	1677.760	12.630	-0.000
159.	4319.966	4.530	0.000	2507.865	-20.420	0.000	1893.713	13.030	-0.000
160.	4325.996	4.600	0.000	2491.224	-21.320	0.000	1933.713	14.340	-0.000
161.	4332.102	4.630	0.000	2473.958	-22.130	0.000	1902.531	15.010	-0.000
162.	4338.231	4.620	0.000	2456.131	-22.670	0.000	1911.214	15.840	-0.000
163.	4344.337	4.580	0.000	2437.825	-23.520	0.000	1921.066	16.230	-0.000
164.	4350.376	4.510	0.000	2419.122	-24.090	0.000	1931.028	16.780	-0.000
165.	4356.304	4.410	0.000	2400.101	-24.570	0.000	1941.382	17.260	-0.000
166.	4362.079	4.270	0.000	2380.843	-24.970	0.000	1952.109	17.750	-0.000
167.	4367.660	4.110	0.000	2361.427	-25.260	0.000	1963.190	18.160	-0.000
168.	4373.010	3.910	0.000	2341.935	-25.510	0.000	1974.806	18.570	-0.000
169.	4378.092	3.700	0.000	2322.447	-25.650	0.000	1986.338	18.920	-0.000
170.	4382.671	3.450	0.000	2303.041	-25.690	0.000	1996.364	19.230	-0.000
171.	4387.316	3.150	0.000	2283.798	-25.640	0.000	2010.667	19.510	-0.000
172.	4391.394	2.900	0.000	2264.795	-25.500	0.000	2023.225	19.750	-0.000
173.	4395.079	2.600	0.000	2246.111	-25.260	0.000	2036.020	19.960	-0.000
174.	4398.343	2.270	0.000	2227.822	-24.920	0.000	2049.030	20.130	-0.000
175.	4401.161	1.930	0.000	2210.005	-24.470	-0.000	2062.236	20.260	0.000
176.	4403.510	1.570	0.000	2192.733	-23.920	-0.000	2075.620	20.390	0.000
177.	4405.369	1.200	0.000	2176.001	-23.250	0.000	2089.160	20.470	0.000
178.	4406.718	.810	0.000	2160.118	-22.470	-0.000	2102.838	20.520	-0.000
179.	4407.539	.410	0.000	2144.916	-21.570	0.000	2116.834	20.550	-0.000
180.	4407.817	0.000	0.000	2130.541	-20.550	-0.000	2130.330	20.550	-0.000

X-PLANE (YZ-PLANE) LEAD MOLYBDATE

	LPMI12	LPMI13	FSRVEL	FSPH12	FSPH13	SSPH12	SSPH13
0.	-0.000	-15.090	2123.012	0.000	43.640	-0.000	-0.000
1.	-1.10	-15.080	2123.381	1.130	43.740	-1.760	-1.760
2.	-2.30	-15.070	2124.466	2.210	43.470	-3.490	-3.490
3.	-3.40	-15.040	2126.225	3.190	43.020	-5.100	-5.100
4.	-4.50	-15.000	2128.577	4.030	42.450	-6.560	-6.560
5.	-5.70	-14.950	2131.434	4.730	41.760	-7.860	-7.860
6.	-6.80	-14.890	2134.700	5.270	41.010	-8.990	-8.990
7.	-7.90	-14.820	2138.281	5.670	40.210	-9.960	-9.960
8.	-9.10	-14.730	2142.086	5.940	39.390	-10.790	-10.790
9.	-1.020	-14.640	2146.041	6.100	38.560	-11.460	-11.460
10.	-1.130	-14.540	2150.068	6.150	37.740	-12.050	-12.050
11.	-1.250	-14.420	2154.110	6.120	36.920	-12.510	-12.510
12.	-1.360	-14.300	2158.112	6.010	36.120	-12.860	-12.860
13.	-1.480	-14.160	2162.030	5.840	35.340	-13.160	-13.160
14.	-1.590	-14.020	2165.825	5.620	34.560	-13.370	-13.370
15.	-1.710	-13.870	2169.465	5.360	33.640	-13.500	-13.500
16.	-1.820	-13.700	2172.922	5.060	32.410	-13.570	-13.570
17.	-1.940	-13.530	2176.172	4.720	31.120	-13.580	-13.580
18.	-2.060	-13.350	2179.194	4.370	31.050	-13.530	-13.530
19.	-2.170	-13.160	2181.973	3.960	30.390	-13.430	-13.430
20.	-2.290	-12.960	2184.493	3.580	29.740	-13.270	-13.270
21.	-2.410	-12.750	2186.743	3.170	29.100	-13.070	-13.070
22.	-2.520	-12.540	2188.712	2.740	28.460	-12.810	-12.810
23.	-2.640	-12.320	2190.393	2.300	27.860	-12.510	-12.510
24.	-2.760	-12.090	2191.775	1.850	27.250	-12.160	-12.160
25.	-2.880	-11.850	2192.864	1.400	26.650	-11.760	-11.760
26.	-3.000	-11.610	2193.646	940	26.050	-11.320	-11.320
27.	-3.120	-11.360	2194.122	480	25.460	-10.840	-10.840
28.	-3.230	-11.110	2194.290	020	24.860	-10.310	-10.310
29.	-3.350	-10.850	2194.151	-440	24.300	-9.750	-9.750
30.	-3.470	-10.590	2193.704	-900	23.720	-9.140	-9.140
31.	-3.590	-10.320	2192.953	-1.350	23.150	-8.510	-8.510
32.	-3.710	-10.050	2191.899	-1.800	22.590	-7.860	-7.860
33.	-3.830	-9.770	2190.547	-2.250	22.030	-7.130	-7.130
34.	-3.940	-9.490	2188.900	-2.690	21.470	-6.390	-6.390
35.	-4.060	-9.210	2186.963	-3.120	20.920	-5.630	-5.630
36.	-4.180	-8.930	2184.742	-3.540	20.370	-4.850	-4.850
37.	-4.290	-8.640	2182.244	-3.960	19.830	-4.050	-4.050
38.	-4.410	-8.360	2179.476	-4.360	19.290	-3.230	-3.230
39.	-4.520	-8.070	2176.446	-4.750	18.750	-2.390	-2.390
40.	-4.630	-7.780	2173.161	-5.140	18.220	-1.550	-1.550
41.	-4.740	-7.490	2169.632	-5.500	17.700	-0.700	-0.700
42.	-4.850	-7.200	2165.867	-5.860	17.160	0.140	0.140
43.	-4.950	-6.920	2161.877	-6.200	16.600	0.990	0.990
44.	-5.050	-6.630	2157.671	-6.530	16.050	1.630	1.630
45.	-5.150	-6.350	2153.262	-6.840	15.500	2.050	2.050
46.	-5.250	-6.070	2148.660	-7.130	14.940	2.460	2.460
47.	-5.340	-5.790	2143.877	-7.410	14.380	2.850	2.850
48.	-5.430	-5.510	2138.927	-7.680	13.820	3.230	3.230
49.	-5.510	-5.240	2133.820	-7.920	13.260	3.600	3.600

X-PLANE (YZ-PLANE) LEAD HOLYBDATE

	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSKVEL	SSPHI12	SSPHI13
50.	3835.102	-5.590	2128.571	-8.140	13.600	1759.375	6.480	3.260
51.	3826.515	-5.660	2123.192	-8.350	13.200	1763.053	7.160	2.740
52.	3821.857	-5.730	2117.697	-8.500	12.760	1767.101	7.610	2.240
53.	3815.136	-5.750	2112.100	-8.700	12.270	1771.504	8.420	1.750
54.	3808.359	-5.840	2106.415	-8.850	11.820	1776.233	8.980	1.290
55.	3801.534	-5.890	2100.656	-8.980	11.370	1781.300	9.510	0.840
56.	3794.672	-5.930	2094.837	-9.080	10.930	1786.653	9.990	0.410
57.	3787.781	-5.960	2088.974	-9.160	10.490	1792.282	10.430	0.010
58.	3780.873	-5.980	2083.081	-9.220	10.070	1798.184	10.820	-0.370
59.	3773.956	-5.990	2077.172	-9.260	9.650	1804.275	11.170	-0.730
60.	3767.044	-6.000	2071.253	-9.280	9.240	1810.591	11.470	-1.080
61.	3760.148	-6.000	2065.366	-9.270	8.830	1817.086	11.710	-1.360
62.	3753.280	-5.990	2059.502	-9.240	8.440	1823.733	11.910	-1.590
63.	3746.453	-5.940	2053.680	-9.180	8.050	1830.586	12.060	-1.800
64.	3739.680	-5.900	2047.917	-9.110	7.670	1837.378	12.160	-2.010
65.	3732.977	-5.840	2042.227	-9.010	7.300	1844.319	12.210	-2.210
66.	3726.356	-5.770	2036.624	-8.880	6.930	1851.301	12.210	-2.410
67.	3719.834	-5.690	2031.124	-8.730	6.560	1858.255	12.160	-2.610
68.	3713.425	-5.590	2025.739	-8.560	6.230	1865.273	12.070	-2.790
69.	3707.145	-5.460	2020.484	-8.370	5.860	1872.204	11.920	-2.910
70.	3701.010	-5.360	2015.373	-8.150	5.510	1879.059	11.730	-3.000
71.	3695.036	-5.220	2010.418	-7.910	5.220	1885.839	11.490	-3.150
72.	3689.240	-5.060	2005.632	-7.640	4.900	1892.425	11.200	-3.280
73.	3683.637	-4.890	2001.026	-7.360	4.590	1898.878	10.870	-3.410
74.	3678.245	-4.700	1996.616	-7.050	4.260	1905.140	10.490	-3.570
75.	3673.079	-4.500	1992.413	-6.720	3.960	1911.182	10.070	-3.640
76.	3668.157	-4.260	1988.424	-6.370	3.600	1916.979	9.610	-3.730
77.	3663.493	-4.050	1984.663	-6.010	3.400	1922.503	9.110	-3.820
78.	3659.103	-3.810	1981.118	-5.620	3.110	1927.730	8.570	-3.900
79.	3655.002	-3.540	1977.859	-5.220	2.830	1932.635	7.990	-4.000
80.	3651.204	-3.270	1974.835	-4.800	2.560	1937.196	7.380	-4.100
81.	3647.724	-2.980	1972.074	-4.360	2.290	1941.332	6.740	-4.200
82.	3644.573	-2.680	1969.583	-3.920	2.030	1945.201	6.070	-4.300
83.	3641.763	-2.370	1967.365	-3.460	1.760	1948.608	5.370	-4.400
84.	3639.306	-2.050	1965.435	-2.990	1.510	1951.594	4.650	-4.500
85.	3637.210	-1.730	1963.796	-2.500	1.250	1954.146	3.910	-4.600
86.	3635.483	-1.390	1962.446	-2.010	1.000	1956.251	3.150	-4.700
87.	3634.133	-1.050	1961.392	-1.510	0.750	1957.899	2.370	-4.800
88.	3633.165	-0.700	1960.637	-1.010	0.500	1959.082	1.590	-4.900
89.	3632.583	-0.350	1960.184	-0.510	0.250	1959.795	0.800	-5.000
90.	3632.388	0.000	1960.032	0.000	0.000	1960.032	-0.000	-5.100
91.	3632.583	0.000	1960.184	0.510	0.250	1960.637	1.590	-5.200
92.	3633.165	1.050	1961.392	1.010	0.750	1962.446	2.370	-5.300
93.	3634.133	1.390	1962.446	1.510	1.000	1963.796	3.150	-5.400
94.	3635.483	1.730	1963.796	2.010	1.250	1965.435	3.910	-5.500
95.	3637.210	2.050	1965.439	2.500	1.510	1967.369	4.650	-5.600
96.	3639.306	2.370	1967.369	3.460	1.760	1969.583	5.370	-5.700
97.	3641.763	2.680	1969.583	3.920	2.030	1972.074	6.070	-5.800
98.	3644.573	2.980	1972.074	4.360	2.290	1974.835	6.740	-5.900
99.	3647.724	2.960	1972.074	4.360	2.290	1974.835	6.740	-6.000

X-PLANE (YZ-PLANE) LEAD MOLYBDATE

	LNCVEL	LPH112	LPH113	FSRVEL	FSPH112	FSPH113	SSRVEL	SSPH112	SSPH113
100.	3651.204	3.270	.130	1974.835	4.800	-2.560	1937.196	-7.300	2.200
101.	3655.002	3.540	.170	1977.859	5.220	-2.830	1932.635	-7.990	2.360
102.	3659.103	3.810	.220	1981.136	5.620	-3.110	1927.730	-8.570	2.500
103.	3663.493	4.050	.270	1984.563	6.010	-3.400	1922.503	-9.110	2.620
104.	3668.157	4.280	.340	1988.824	6.370	-3.680	1916.379	-9.610	2.730
105.	3673.075	4.500	.410	1992.413	6.720	-3.960	1911.182	-10.070	2.810
106.	3678.245	4.700	.490	1996.616	7.050	-4.220	1905.140	-10.450	2.870
107.	3683.637	4.890	.560	2001.028	7.360	-4.500	1898.876	-10.70	2.910
108.	3689.240	5.060	.630	2005.632	7.640	-4.760	1892.425	-11.200	2.920
109.	3695.036	5.220	.700	2010.416	7.910	-5.000	1885.805	-11.450	2.910
110.	3701.010	5.360	.760	2015.373	8.150	-5.250	1879.059	-11.730	2.860
111.	3707.145	5.480	1.040	2020.404	8.370	-5.500	1872.204	-11.920	2.610
112.	3713.425	5.590	1.170	2025.735	8.560	-5.760	1865.273	-12.070	2.730
113.	3719.834	5.690	1.320	2031.124	8.730	-6.030	1858.295	-12.160	2.610
114.	3726.356	5.770	1.470	2036.524	8.880	-6.300	1851.301	-12.210	2.470
115.	3732.977	5.840	1.630	2042.227	9.010	-6.560	1844.319	-12.210	2.310
116.	3739.680	5.900	1.800	2047.917	9.110	-6.800	1837.376	-12.160	2.110
117.	3746.453	5.940	1.980	2053.680	9.160	-7.050	1830.506	-12.060	1.890
118.	3753.280	5.970	2.170	2059.502	9.246	-7.300	1823.733	-11.910	1.690
119.	3760.148	5.990	2.370	2065.368	9.270	-7.560	1817.066	-11.710	1.360
120.	3767.044	6.000	2.570	2071.263	9.260	-7.820	1810.531	-11.470	1.060
121.	3773.956	5.990	2.780	2077.172	9.260	-8.070	1804.275	-11.170	.730
122.	3780.873	5.960	3.000	2083.061	9.220	-8.320	1798.164	-10.820	.370
123.	3787.761	5.960	3.230	2088.974	9.160	-8.570	1792.282	-10.430	-.010
124.	3794.672	5.930	3.460	2094.837	9.080	-8.820	1786.653	-10.000	-.410
125.	3801.534	5.890	3.700	2100.656	8.960	-9.070	1781.300	-9.550	-.800
126.	3808.359	5.840	3.940	2106.415	8.850	-9.320	1776.243	-9.060	-1.200
127.	3815.136	5.790	4.190	2112.100	8.700	-9.570	1771.504	-8.560	-1.700
128.	3821.857	5.730	4.450	2117.697	8.540	-9.820	1767.101	-8.020	-2.240
129.	3828.515	5.660	4.710	2123.192	8.350	-10.070	1763.053	-7.460	-2.740
130.	3835.102	5.590	4.970	2128.571	8.140	-10.320	1759.375	-6.860	-3.220
131.	3841.610	5.510	5.240	2133.820	7.920	-10.570	1756.082	-6.250	-3.790
132.	3848.034	5.430	5.510	2138.927	7.680	-10.820	1753.189	-5.620	-4.340
133.	3854.360	5.340	5.790	2143.877	7.410	-11.070	1750.707	-4.990	-4.890
134.	3860.605	5.250	6.070	2148.660	7.130	-11.320	1748.647	-4.250	-5.440
135.	3866.741	5.150	6.350	2153.262	6.840	-11.570	1746.847	-3.460	-5.990
136.	3872.771	5.050	6.630	2157.671	6.530	-11.820	1745.024	-2.650	-6.510
137.	3878.691	4.950	6.920	2161.877	6.200	-12.070	1743.076	-1.830	-7.130
138.	3884.496	4.850	7.200	2165.867	5.860	-12.320	1741.074	-1.000	-7.660
139.	3890.184	4.740	7.490	2169.632	5.500	-12.570	1739.023	-.140	-8.200
140.	3895.751	4.630	7.780	2173.161	5.140	-12.820	1736.923	1.550	-8.770
141.	3901.195	4.520	8.070	2176.446	4.750	-13.070	1734.772	2.350	-9.300
142.	3906.512	4.410	8.360	2179.476	4.360	-13.320	1732.572	3.230	-9.820
143.	3911.701	4.290	8.640	2182.244	3.960	-13.570	1730.309	4.070	-10.310
144.	3916.755	4.160	8.930	2184.742	3.540	-13.820	1727.987	4.850	-10.790
145.	3921.685	4.060	9.210	2186.963	3.120	-14.070	1725.615	5.630	-11.250
146.	3926.477	3.940	9.490	2188.900	2.690	-14.320	1723.190	6.390	-11.680
147.	3931.134	3.830	9.770	2190.547	2.250	-14.570	1720.726	7.130	-12.090
148.	3935.654	3.710	10.050	2191.899	1.800	-14.820	1718.226	7.850	-12.460
149.	3940.036	3.590	10.320	2192.953	1.350	-15.070	1715.646	8.510	-12.810

X-PLANE (YZ-PLANE) LEAD MOLYBDATE									
	LPHI12		LPHI13		FSRVEL		FSPH12		BULK
	LPHI12	LPHI13	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	
150.	3944.283	3.470	10.590	2193.704	.500		-24.300	1775.352	SSPH13
151.	3948.390	3.350	10.650	2194.151	.440		-24.860	1780.516	-13.120
152.	3952.357	3.230	11.110	2194.290	-.020		-25.460	1786.023	-13.400
153.	3956.185	3.120	11.360	2194.122	-.460		-26.050	1791.054	-13.650
154.	3959.873	3.000	11.610	2193.646	-.940		-26.650	1797.990	-13.850
155.	3963.421	2.880	11.850	2192.864	-1.400		-27.250	1804.410	-14.010
156.	3966.829	2.760	12.090	2191.779	-1.850		-27.860	1811.035	-14.130
157.	3970.096	2.640	12.320	2190.393	-2.300		-28.480	1818.021	-14.210
158.	3973.223	2.520	12.540	2188.712	-2.740		-29.100	1825.184	-14.240
159.	3976.210	2.410	12.750	2186.743	-3.170		-29.740	1832.500	-14.150
160.	3979.056	2.300	12.960	2184.493	-3.580		-30.390	1840.003	-14.010
161.	3981.763	2.170	13.160	2181.973	-3.960		-31.050	1847.644	-13.820
162.	3984.329	2.060	13.350	2179.154	-4.370		-31.720	1855.344	-13.570
163.	3986.755	1.940	13.530	2176.172	-4.720		-32.410	1863.233	-13.260
164.	3989.042	1.820	13.700	2172.922	-5.060		-33.120	1871.037	-12.860
165.	3991.189	1.710	13.870	2169.465	-5.380		-33.840	1878.981	-12.400
166.	3993.196	1.590	14.020	2165.825	-5.620		-34.560	1886.035	-11.960
167.	3995.065	1.480	14.160	2162.030	-5.840		-35.340	1894.610	-11.600
168.	3996.794	1.360	14.300	2158.112	-6.010		-36.120	1902.284	-11.230
169.	3998.364	1.250	14.420	2154.110	-6.120		-36.920	1909.782	-10.850
170.	3999.836	1.130	14.540	2150.068	-6.150		-37.740	1917.056	-10.460
171.	4001.146	1.020	14.640	2146.041	-6.100		-38.560	1924.040	-10.000
172.	4002.323	.910	14.730	2142.066	-5.940		-39.390	1930.866	-9.500
173.	4003.359	.790	14.820	2138.261	-5.670		-40.210	1938.852	-8.960
174.	4004.256	.680	14.890	2134.700	-5.270		-41.010	1947.511	-8.390
175.	4005.015	.570	14.950	2131.434	-4.730		-41.760	1951.961	-7.860
176.	4005.636	.450	15.000	2128.577	-4.030		-42.450	1957.351	-7.310
177.	4006.120	.340	15.040	2126.225	-3.190		-43.120	1955.351	-6.760
178.	4006.464	.230	15.070	2124.468	-2.210		-43.740	1957.923	-6.200
179.	4006.671	.110	15.080	2123.381	-1.130		-44.340	1959.500	-5.610
180.	4006.740	-0.000	15.090	2123.012	0.000		-44.940	1960.032	-5.000

2-PLANE (XY-PLANE) L-CAD MOLYBDATE

	LWCVEL	LQY12	LQY13	FSRVCL	FQPM12	FQPM13	SSRVCL	SSPM12	SSPM13
0.	4006.740	15.099	0.010	2123.012	-43.840	0.000	1960.032	0.000	0.000
1.	4025.607	15.030	0.000	2087.018	-44.970	0.000	1960.032	0.000	0.000
2.	4044.473	14.960	0.010	2050.296	-45.900	0.000	1960.032	0.000	0.000
3.	4063.339	14.890	0.000	2012.992	-46.900	0.000	1960.032	0.000	0.000
4.	4081.511	14.820	0.010	1975.246	-47.720	0.000	1960.032	0.000	0.000
5.	4099.807	14.750	0.000	1937.198	-48.450	0.000	1960.032	0.000	0.000
6.	4117.667	14.680	0.010	1898.983	-49.000	0.000	1960.032	0.000	0.000
7.	4135.070	14.610	0.000	1860.714	-49.540	0.000	1960.032	0.000	0.000
8.	4152.021	14.540	0.010	1822.501	-50.100	0.000	1960.032	0.000	0.000
9.	4168.449	14.470	0.000	1784.707	-50.450	0.000	1960.032	0.000	0.000
10.	4184.310	14.400	0.010	1747.199	-50.710	0.000	1960.032	0.000	0.000
11.	4199.551	14.330	0.000	1710.217	-50.850	0.000	1960.032	0.000	0.000
12.	4214.155	14.260	0.010	1673.098	-50.880	0.000	1960.032	0.000	0.000
13.	4228.088	14.190	0.000	1635.820	-50.770	0.000	1960.032	0.000	0.000
14.	4241.301	14.120	0.010	1598.307	-50.510	0.000	1960.032	0.000	0.000
15.	4253.775	14.050	0.000	1560.526	-50.080	0.000	1960.032	0.000	0.000
16.	4265.445	13.980	0.010	1522.478	-49.450	0.000	1960.032	0.000	0.000
17.	4276.409	13.910	0.000	1484.107	-48.600	0.000	1960.032	0.000	0.000
18.	4286.526	13.840	0.010	1445.794	-47.470	0.000	1960.032	0.000	0.000
19.	4295.820	13.770	0.000	1407.590	-46.040	0.000	1960.032	0.000	0.000
20.	4304.271	13.700	0.010	1369.419	-44.220	0.000	1960.032	0.000	0.000
21.	4311.877	13.630	0.000	1331.219	-41.970	0.000	1960.032	0.000	0.000
22.	4318.504	13.560	0.010	1293.093	-39.190	0.000	1960.032	0.000	0.000
23.	4324.459	13.490	0.000	1255.033	-35.790	0.000	1960.032	0.000	0.000
24.	4329.827	13.420	0.010	1217.039	-31.500	0.000	1960.032	0.000	0.000
25.	4334.501	13.350	0.000	1179.114	-26.400	0.000	1960.032	0.000	0.000
26.	4338.575	13.280	0.010	1141.261	-21.090	0.000	1960.032	0.000	0.000
27.	4342.043	13.210	0.000	1103.501	-14.540	0.000	1960.032	0.000	0.000
28.	4344.913	13.140	0.010	1065.831	-7.440	0.000	1960.032	0.000	0.000
29.	4347.183	13.070	0.000	1028.251	7.560	0.000	1960.032	0.000	0.000
30.	4348.853	13.000	0.010	990.771	14.570	0.000	1960.032	0.000	0.000
31.	4349.923	12.930	0.000	953.391	21.160	0.000	1960.032	0.000	0.000
32.	4350.493	12.860	0.010	916.011	26.870	0.000	1960.032	0.000	0.000
33.	4350.563	12.790	0.000	878.631	31.750	0.000	1960.032	0.000	0.000
34.	4350.133	12.720	0.010	841.251	35.840	0.000	1960.032	0.000	0.000
35.	4349.203	12.650	0.000	803.871	39.230	0.000	1960.032	0.000	0.000
36.	4347.773	12.580	0.010	766.491	42.000	0.000	1960.032	0.000	0.000
37.	4345.843	12.510	0.000	729.111	44.250	0.000	1960.032	0.000	0.000
38.	4343.413	12.440	0.010	691.731	46.060	0.000	1960.032	0.000	0.000
39.	4340.483	12.370	0.000	654.351	47.490	0.000	1960.032	0.000	0.000
40.	4337.053	12.300	0.010	616.971	48.510	0.000	1960.032	0.000	0.000
41.	4333.123	12.230	0.000	579.591	49.160	0.000	1960.032	0.000	0.000
42.	4328.693	12.160	0.010	542.211	49.460	0.000	1960.032	0.000	0.000
43.	4323.763	12.090	0.000	504.831	50.000	0.000	1960.032	0.000	0.000
44.	4318.333	12.020	0.010	467.451	50.090	0.000	1960.032	0.000	0.000
45.	4312.403	11.950	0.000	430.071	50.520	0.000	1960.032	0.000	0.000
46.	4305.973	11.880	0.010	392.691	50.770	0.000	1960.032	0.000	0.000
47.	4299.043	11.810	0.000	355.311	50.880	0.000	1960.032	0.000	0.000
48.	4291.613	11.740	0.010	317.931	50.850	0.000	1960.032	0.000	0.000
49.	4283.683	11.670	0.000	280.551	50.710	0.000	1960.032	0.000	0.000
50.	4275.253	11.600	0.010	243.171	50.450	0.000	1960.032	0.000	0.000

Z-PLANE (XY-PLANE) LEAD MOLYBDATE

	LMOVL	LMOV12	LMOV13	FSRVL	FSRVL12	FSRVL13	SSRVL	SSRVL12	SSRVL13
50.	4151.769	-12.480	0.000	1823.129	50.090	0.000	1950.032	0.000	0.000
51.	4134.911	-13.410	0.000	1851.269	49.630	0.000	1950.032	-0.000	0.000
52.	4117.402	-13.800	0.000	1894.515	49.040	0.000	1950.032	0.000	0.000
53.	4099.556	-14.150	0.000	1937.720	48.440	0.000	1950.032	0.000	0.000
54.	4081.356	-14.450	0.000	1975.773	47.710	0.000	1950.032	0.000	0.000
55.	4062.870	-14.700	0.000	2013.514	46.890	0.000	1950.032	0.000	0.000
56.	4044.172	-14.900	0.000	2050.811	45.970	0.000	1950.032	0.000	0.000
57.	4025.164	-15.030	0.000	2087.523	44.950	0.000	1950.032	0.000	0.000
58.	4006.479	-15.090	0.000	2123.507	43.820	0.000	1950.032	-0.000	0.000
59.	3987.674	-15.070	0.000	2158.513	42.580	0.000	1950.032	0.000	0.000
60.	3969.040	-14.950	0.000	2192.586	41.200	0.000	1950.032	0.000	0.000
61.	3950.636	-14.750	0.000	2225.557	39.680	0.000	1950.032	0.000	0.000
62.	3932.722	-14.470	0.000	2257.090	38.010	0.000	1950.032	-0.000	0.000
63.	3915.404	-14.000	0.000	2287.079	36.150	0.000	1950.032	0.000	0.000
64.	3898.754	-13.430	0.000	2315.357	34.100	0.000	1950.032	0.000	0.000
65.	3882.966	-12.720	0.000	2341.716	31.830	0.000	1950.032	0.000	0.000
66.	3868.211	-11.850	0.000	2366.823	29.310	0.000	1950.032	0.000	0.000
67.	3854.658	-10.850	0.000	2389.845	26.540	0.000	1950.032	0.000	0.000
68.	3842.477	-9.800	0.000	2407.596	23.480	0.000	1950.032	0.000	0.000
69.	3831.833	-8.560	0.000	2424.501	20.150	0.000	1950.032	0.000	0.000
70.	3822.801	-7.490	0.000	2440.592	16.530	0.000	1950.032	0.000	0.000
71.	3815.847	-6.220	0.000	2449.717	12.550	0.000	1950.032	-0.000	0.000
72.	3810.591	-5.500	0.000	2457.753	8.560	0.000	1950.032	0.000	0.000
73.	3807.457	-4.400	0.000	2462.614	4.310	0.000	1950.032	-0.000	0.000
74.	3805.416	-3.010	0.000	2464.213	-0.330	0.000	1950.032	-0.000	0.000
75.	3807.466	1.830	0.000	2462.559	-4.370	0.000	1950.032	-0.000	0.000
76.	3810.589	3.510	0.000	2457.667	-8.520	0.000	1950.032	0.000	0.000
77.	3815.847	5.310	0.000	2449.514	-12.710	0.000	1950.032	0.000	0.000
78.	3822.994	6.910	0.000	2438.416	-15.580	0.000	1950.032	-0.000	0.000
79.	3831.970	8.180	0.000	2424.215	-20.200	0.000	1950.032	0.000	0.000
80.	3842.535	9.700	0.000	2407.142	-23.530	0.000	1950.032	0.000	0.000
81.	3854.818	10.470	0.000	2387.256	-26.580	0.000	1950.032	0.000	0.000
82.	3868.408	11.880	0.000	2365.707	-29.350	0.000	1950.032	0.000	0.000
83.	3883.178	12.730	0.000	2341.314	-31.860	0.000	1950.032	-0.000	0.000
84.	3899.979	13.440	0.000	2314.976	-34.130	0.000	1950.032	-0.000	0.000
85.	3915.645	14.000	0.000	2286.674	-35.180	0.000	1950.032	0.000	0.000
86.	3933.018	14.440	0.000	2256.662	-38.030	0.000	1950.032	0.000	0.000
87.	3950.949	14.760	0.000	2225.120	-39.710	0.000	1950.032	0.000	0.000
88.	3969.297	14.960	0.000	2192.221	-41.220	0.000	1950.032	0.000	0.000
89.	3987.934	15.070	0.000	2158.171	-42.500	0.000	1950.032	-0.000	0.000
90.	4006.740	15.090	0.000	2123.012	-43.460	0.000	1950.032	0.000	0.000
91.	4025.607	15.030	0.000	2087.019	-44.970	0.000	1950.032	0.000	0.000
92.	4044.433	14.990	0.000	2050.296	-45.990	0.000	1950.032	0.000	0.000
93.	4063.129	14.700	0.000	2012.992	-46.900	0.000	1950.032	-0.000	0.000
94.	4081.611	14.450	0.000	1975.266	-47.720	0.000	1950.032	0.000	0.000
95.	4099.807	14.140	0.000	1937.198	-48.450	0.000	1950.032	0.000	0.000
96.	4117.687	13.790	0.000	1898.983	-49.090	0.000	1950.032	0.000	0.000
97.	4135.070	13.400	0.000	1860.718	-49.640	0.000	1950.032	0.000	0.000
98.	4152.021	12.980	0.000	1822.601	-50.100	0.000	1950.032	-0.000	0.000
99.	4168.449	12.520	0.000	1784.707	-50.450	0.000	1950.032	0.000	0.000

Z-PLANE (XY-PLANE) LEAD MOLYBDATE

	LNVEL	LPHI12	LPHI11	FSRVFL	FSPHI12	FSPHI11	SSPVFL	SSPHI12	SSPHI11
100.	4184.310	12.030	0.000	1747.199	-50.710	0.000	1060.032	0.000	0.000
101.	4199.561	11.524	0.000	1710.217	-50.850	0.000	1060.032	0.000	0.000
102.	4214.155	10.989	0.000	1673.904	-50.899	0.000	1060.032	0.000	0.000
103.	4228.088	10.420	0.000	1638.420	-50.770	0.000	1060.032	0.000	0.000
104.	4241.301	9.850	0.000	1603.907	-50.510	0.000	1060.032	0.000	0.000
105.	4254.774	9.260	0.000	1570.526	-50.080	0.000	1060.032	0.000	0.000
106.	4268.485	8.650	0.000	1538.434	-49.459	0.000	1060.032	0.000	0.000
107.	4282.409	8.030	0.000	1507.407	-48.600	0.000	1060.032	0.000	0.000
108.	4296.525	7.390	0.000	1478.794	-47.479	0.000	1060.032	0.000	0.000
109.	4295.420	6.750	0.000	1451.590	-46.040	0.000	1060.032	0.000	0.000
110.	4304.273	6.100	0.000	1426.314	-44.220	0.000	1060.032	0.000	0.000
111.	4311.872	5.440	0.000	1403.174	-41.979	0.000	1060.032	0.000	0.000
112.	4318.504	4.770	0.000	1382.319	-39.190	0.000	1060.032	0.000	0.000
113.	4324.459	4.100	0.000	1363.493	-35.790	0.000	1060.032	0.000	0.000
114.	4329.427	3.420	0.000	1346.039	-31.590	0.000	1060.032	0.000	0.000
115.	4333.501	2.740	0.000	1330.885	-26.400	0.000	1060.032	0.000	0.000
116.	4336.675	2.060	0.000	1324.539	-21.090	0.000	1060.032	0.000	0.000
117.	4338.943	1.370	0.000	1317.089	-14.540	0.000	1060.032	0.000	0.000
118.	4340.303	0.680	0.000	1312.601	-7.440	0.000	1060.032	0.000	0.000
119.	4340.752	-0.000	0.000	1311.114	0.000	0.000	1060.032	0.000	0.000
120.	4340.290	-0.690	0.000	1312.643	7.549	0.000	1060.032	0.000	0.000
121.	4338.914	-1.380	0.000	1317.172	14.679	0.000	1060.032	0.000	0.000
122.	4336.637	-2.070	0.000	1324.663	21.160	0.000	1060.032	0.000	0.000
123.	4333.461	-2.750	0.000	1335.049	26.879	0.000	1060.032	0.000	0.000
124.	4329.364	-3.430	0.000	1348.241	31.760	0.000	1060.032	0.000	0.000
125.	4324.384	-4.110	0.000	1364.132	35.849	0.000	1060.032	0.000	0.000
126.	4318.517	-4.780	0.000	1382.593	39.239	0.000	1060.032	0.000	0.000
127.	4311.772	-5.450	0.000	1403.445	42.000	0.000	1060.032	0.000	0.000
128.	4304.152	-6.110	0.000	1426.655	44.259	0.000	1060.032	0.000	0.000
129.	4295.696	-6.760	0.000	1451.945	46.069	0.000	1060.032	0.000	0.000
130.	4286.391	-7.400	0.000	1479.149	47.439	0.000	1060.032	0.000	0.000
131.	4276.242	-8.030	0.000	1508.222	48.510	0.000	1060.032	0.000	0.000
132.	4265.327	-8.650	0.000	1538.875	49.469	0.000	1060.032	0.000	0.000
133.	4253.606	-9.260	0.000	1570.992	50.090	0.000	1060.032	0.000	0.000
134.	4241.122	-9.850	0.000	1604.379	50.529	0.000	1060.032	0.000	0.000
135.	4227.900	-10.430	0.000	1638.907	50.770	0.000	1060.032	0.000	0.000
136.	4214.956	-10.990	0.000	1674.407	50.899	0.000	1060.032	0.000	0.000
137.	4199.353	-11.520	0.000	1710.726	50.959	0.000	1060.032	0.000	0.000
138.	4184.087	-12.040	0.000	1747.717	50.710	0.000	1060.032	0.000	0.000
139.	4168.255	-12.520	0.000	1785.232	50.459	0.000	1060.032	0.000	0.000
140.	4151.782	-12.980	0.000	1823.129	50.099	0.000	1060.032	0.000	0.000
141.	4134.831	-13.410	0.000	1861.269	49.639	0.000	1060.032	0.000	0.000
142.	4117.402	-13.800	0.000	1899.515	49.089	0.000	1060.032	0.000	0.000
143.	4099.555	-14.150	0.000	1937.729	48.440	0.000	1060.032	0.000	0.000
144.	4081.356	-14.450	0.000	1975.773	47.710	0.000	1060.032	0.000	0.000
145.	4062.870	-14.700	0.000	2013.514	46.890	0.000	1060.032	0.000	0.000
146.	4044.172	-14.900	0.000	2050.911	45.970	0.000	1060.032	0.000	0.000
147.	4025.344	-15.030	0.000	2087.993	44.950	0.000	1060.032	0.000	0.000
148.	4006.479	-15.090	0.000	2123.507	43.830	0.000	1060.032	0.000	0.000
149.	3987.674	-15.070	0.000	2158.613	42.540	0.000	1060.032	0.000	0.000

Z-PLANE (YV-PLANE) LEAD MOLYBDATE

	LNGVEL	LPHI12	LPHI13	FSPJFL	FSPMT12	FSPMT13	SSPMT12	SSPMT13
150.	1969.840	-14.960	0.000	2192.686	43.200	0.000	0.000	0.000
151.	1968.596	-14.750	0.000	2225.567	38.500	0.000	0.000	0.000
152.	1932.772	-14.430	0.000	2257.090	38.010	0.000	0.000	0.000
153.	1915.808	-14.000	0.000	2287.079	36.150	0.000	0.000	0.000
154.	1909.753	-13.430	0.000	2315.357	34.100	0.000	0.000	0.000
155.	1902.966	-12.720	0.000	2341.736	31.830	0.000	0.000	0.000
156.	1894.211	-11.960	0.000	2366.029	29.310	0.000	0.000	0.000
157.	1884.558	-11.050	0.000	2388.045	26.540	0.000	0.000	0.000
158.	1872.877	-9.580	0.000	2407.596	23.600	0.000	0.000	0.000
159.	1859.833	-8.360	0.000	2424.501	20.150	0.000	0.000	0.000
160.	1842.841	-6.890	0.000	2438.502	16.500	0.000	0.000	0.000
161.	1815.762	-5.200	0.000	2449.717	12.650	0.000	0.000	0.000
162.	1810.591	-3.580	0.000	2457.753	8.560	0.000	0.000	0.000
163.	1807.457	-1.900	0.000	2462.604	4.310	0.000	0.000	0.000
164.	1806.416	0.010	0.000	2464.213	-0.030	0.000	0.000	0.000
165.	1807.886	1.830	0.000	2462.559	-4.370	0.000	0.000	0.000
166.	1810.649	3.610	0.000	2457.563	-8.650	0.000	0.000	0.000
167.	1815.847	5.310	0.000	2449.546	-12.710	0.000	0.000	0.000
168.	1822.094	6.910	0.000	2438.416	-16.500	0.000	0.000	0.000
169.	1831.970	8.390	0.000	2424.795	-20.200	0.000	0.000	0.000
170.	1842.615	9.700	0.000	2407.342	-23.530	0.000	0.000	0.000
171.	1854.838	10.870	0.000	2387.756	-26.540	0.000	0.000	0.000
172.	1869.408	11.940	0.000	2365.707	-29.350	0.000	0.000	0.000
173.	1883.178	12.730	0.000	2341.346	-31.860	0.000	0.000	0.000
174.	1899.979	13.440	0.000	2314.976	-34.150	0.000	0.000	0.000
175.	1915.645	14.000	0.000	2286.674	-36.180	0.000	0.000	0.000
176.	1933.018	14.440	0.000	2256.662	-38.030	0.000	0.000	0.000
177.	1950.949	14.760	0.000	2225.120	-39.710	0.000	0.000	0.000
178.	1969.297	14.960	0.000	2192.221	-41.220	0.000	0.000	0.000
179.	1987.934	15.070	0.000	2158.131	-42.500	0.000	0.000	0.000
180.	4006.740	15.040	0.000	2123.012	-43.840	0.000	0.000	0.000

Z-PLANE (XY-PLANE) LEAD SULPHIDE

	LMGWEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	4066.120	0.000	0.000	1751.190	0.000	0.000	1751.190	0.000	0.000
1.	4065.771	-0.560	0.000	1752.001	3.030	0.000	1751.190	-0.000	0.000
2.	4064.724	-1.130	0.000	1754.429	6.030	0.000	1751.190	0.000	0.000
3.	4062.980	-1.650	0.000	1756.463	8.940	0.000	1751.190	0.000	0.000
4.	4060.544	-2.250	0.000	1764.081	11.750	0.000	1751.190	0.000	0.000
5.	4057.420	-2.600	0.000	1771.256	14.410	0.000	1751.190	0.000	0.000
6.	4053.613	-3.350	0.000	1779.951	16.910	0.000	1751.190	0.000	0.000
7.	4049.130	-3.900	0.000	1790.124	19.230	0.000	1751.190	0.000	0.000
8.	4043.982	-4.440	0.000	1801.725	21.360	0.000	1751.190	-0.000	0.000
9.	4038.176	-4.970	0.000	1814.694	23.300	0.000	1751.190	0.000	0.000
10.	4031.726	-5.450	0.000	1828.984	25.050	0.000	1751.190	0.000	0.000
11.	4024.645	-6.010	0.000	1844.515	26.610	0.000	1751.190	0.000	0.000
12.	4016.947	-6.510	0.000	1861.220	27.990	0.000	1751.190	0.000	0.000
13.	4008.649	-7.040	0.000	1879.025	29.200	0.000	1751.190	0.000	0.000
14.	3999.769	-7.460	0.000	1897.853	30.240	0.000	1751.190	0.000	0.000
15.	3990.329	-7.940	0.000	1917.622	31.130	0.000	1751.190	0.000	0.000
16.	3980.351	-8.360	0.000	1938.246	31.860	0.000	1751.190	0.000	0.000
17.	3969.860	-8.810	0.000	1959.645	32.460	0.000	1751.190	0.000	0.000
18.	3958.884	-9.210	0.000	1981.726	32.920	0.000	1751.190	0.000	0.000
19.	3947.453	-9.600	0.000	2004.399	33.250	0.000	1751.190	0.000	0.000
20.	3935.599	-9.950	0.000	2027.575	33.470	0.000	1751.190	-0.000	0.000
21.	3923.360	-10.280	0.000	2051.158	33.570	0.000	1751.190	-0.000	0.000
22.	3910.774	-10.560	0.000	2075.054	33.590	0.000	1751.190	0.000	0.000
23.	3897.884	-10.840	0.000	2099.166	33.430	0.000	1751.190	0.000	0.000
24.	3884.736	-11.060	0.000	2123.396	33.200	0.000	1751.190	0.000	0.000
25.	3871.366	-11.250	0.000	2147.643	32.870	0.000	1751.190	0.000	0.000
26.	3857.684	-11.360	0.000	2171.804	32.430	0.000	1751.190	0.000	0.000
27.	3844.291	-11.470	0.000	2195.774	31.860	0.000	1751.190	0.000	0.000
28.	3830.673	-11.500	0.000	2219.446	31.230	0.000	1751.190	-0.000	0.000
29.	3817.101	-11.480	0.000	2242.704	30.660	0.000	1751.190	0.000	0.000
30.	3803.648	-11.380	0.000	2265.450	29.960	0.000	1751.190	0.000	0.000
31.	3790.396	-11.220	0.000	2287.552	29.570	0.000	1751.190	0.000	0.000
32.	3777.432	-10.940	0.000	2308.897	27.440	0.000	1751.190	0.000	0.000
33.	3764.846	-10.660	0.000	2329.364	26.160	0.000	1751.190	-0.000	0.000
34.	3752.733	-10.250	0.000	2348.828	24.780	0.000	1751.190	0.000	0.000
35.	3741.194	-9.750	0.000	2367.155	23.230	0.000	1751.190	0.000	0.000
36.	3730.330	-9.110	0.000	2384.246	21.530	0.000	1751.190	0.000	0.000
37.	3720.245	-8.460	0.000	2399.953	19.670	0.000	1751.190	0.000	0.000
38.	3711.043	-7.670	0.000	2414.159	17.660	0.000	1751.190	0.000	0.000
39.	3702.823	-6.790	0.000	2428.747	15.500	0.000	1751.190	0.000	0.000
40.	3695.681	-5.820	0.000	2437.610	13.160	0.000	1751.190	-0.000	0.000
41.	3689.704	-4.760	0.000	2446.647	10.730	0.000	1751.190	0.000	0.000
42.	3684.970	-3.640	0.000	2453.772	8.160	0.000	1751.190	-0.000	0.000
43.	3681.541	-2.460	0.000	2458.914	5.500	0.000	1751.190	0.000	0.000
44.	3679.464	-1.240	0.000	2462.021	2.770	0.000	1751.190	0.000	0.000
45.	3678.766	0.000	0.000	2463.060	-0.000	0.000	1751.190	0.000	0.000
46.	3679.464	1.240	0.000	2462.021	-2.770	0.000	1751.190	0.000	0.000
47.	3681.541	2.460	0.000	2458.914	-5.500	0.000	1751.190	0.000	0.000
48.	3684.970	3.640	0.000	2453.772	-8.160	0.000	1751.190	0.000	0.000
49.	3689.704	4.760	0.000	2446.647	-10.730	0.000	1751.190	0.000	0.000

2-PLANE (XY-PLANE) LEAD SULPHIDE									
	LPMH12			LPMH13			FSRVEL		
	LMGVEL	SSRVEL	FSPH12	LMGVEL	SSRVEL	FSPH13	LMGVEL	SSRVEL	FSPH12
50.	3695.681	0.000	2437.610	0.000	2437.610	-13.160	0.000	1751.190	0.000
51.	3702.823	6.790	2426.747	0.000	2426.747	-15.506	0.000	1751.190	-0.000
52.	3711.043	7.670	2414.159	0.000	2414.159	-17.660	0.000	1751.190	0.000
53.	3720.245	8.460	2399.953	0.000	2399.953	-19.670	0.000	1751.190	0.000
54.	3730.330	9.150	2384.246	0.000	2384.246	-21.530	0.000	1751.190	0.000
55.	3741.194	9.750	2367.165	0.000	2367.165	-23.230	0.000	1751.190	0.000
56.	3752.733	10.250	2346.828	0.000	2346.828	-24.780	0.000	1751.190	0.000
57.	3764.646	10.680	2329.364	0.000	2329.364	-26.180	0.000	1751.190	0.000
58.	3777.432	10.950	2308.697	0.000	2308.697	-27.440	0.000	1751.190	0.000
59.	3790.396	11.220	2287.552	0.000	2287.552	-28.570	0.000	1751.190	0.000
60.	3803.648	11.360	2265.450	0.000	2265.450	-29.580	0.000	1751.190	0.000
61.	3817.101	11.480	2242.705	0.000	2242.705	-30.460	0.000	1751.190	0.000
62.	3830.673	11.500	2219.446	0.000	2219.446	-31.230	0.000	1751.190	0.000
63.	3844.291	11.470	2195.774	0.000	2195.774	-31.680	0.000	1751.190	0.000
64.	3857.884	11.360	2171.804	0.000	2171.804	-32.430	0.000	1751.190	0.000
65.	3871.366	11.250	2147.643	0.000	2147.643	-32.670	0.000	1751.190	0.000
66.	3884.738	11.060	2123.396	0.000	2123.396	-33.200	0.000	1751.190	0.000
67.	3897.884	10.640	2099.166	0.000	2099.166	-33.430	0.000	1751.190	0.000
68.	3910.774	10.560	2075.054	0.000	2075.054	-33.550	0.000	1751.190	0.000
69.	3923.360	10.280	2051.158	0.000	2051.158	-33.570	0.000	1751.190	0.000
70.	3935.599	9.950	2027.575	0.000	2027.575	-33.470	0.000	1751.190	0.000
71.	3947.453	9.600	2004.399	0.000	2004.399	-33.250	0.000	1751.190	0.000
72.	3958.884	9.210	1981.726	0.000	1981.726	-32.920	0.000	1751.190	0.000
73.	3969.860	8.810	1959.645	0.000	1959.645	-32.460	0.000	1751.190	0.000
74.	3980.351	8.380	1936.246	0.000	1936.246	-31.860	0.000	1751.190	0.000
75.	3990.329	7.940	1917.622	0.000	1917.622	-31.130	0.000	1751.190	0.000
76.	3999.769	7.460	1897.853	0.000	1897.853	-30.240	0.000	1751.190	0.000
77.	4008.649	7.000	1879.825	0.000	1879.825	-29.200	0.000	1751.190	0.000
78.	4016.947	6.510	1861.220	0.000	1861.220	-27.990	0.000	1751.190	0.000
79.	4024.645	6.010	1844.515	0.000	1844.515	-26.610	0.000	1751.190	0.000
80.	4031.726	5.490	1828.984	0.000	1828.984	-25.050	0.000	1751.190	0.000
81.	4038.176	4.970	1814.699	0.000	1814.699	-23.300	0.000	1751.190	0.000
82.	4043.982	4.440	1801.725	0.000	1801.725	-21.360	0.000	1751.190	0.000
83.	4049.130	3.900	1790.124	0.000	1790.124	-19.230	0.000	1751.190	0.000
84.	4053.613	3.350	1779.951	0.000	1779.951	-16.910	0.000	1751.190	0.000
85.	4057.420	2.800	1771.256	0.000	1771.256	-14.410	0.000	1751.190	0.000
86.	4060.544	2.250	1764.081	0.000	1764.081	-11.750	0.000	1751.190	0.000
87.	4062.980	1.690	1758.463	0.000	1758.463	-8.946	0.000	1751.190	0.000
88.	4064.724	1.130	1754.429	0.000	1754.429	-6.030	0.000	1751.190	0.000
89.	4065.771	0.560	1752.001	0.000	1752.001	-3.030	0.000	1751.190	0.000
90.	4066.120	-0.000	1751.190	0.000	1751.190	0.000	0.000	1751.190	0.000
91.	4065.771	-0.560	1752.001	0.000	1752.001	3.030	0.000	1751.190	0.000
92.	4064.724	-1.130	1754.429	0.000	1754.429	6.030	0.000	1751.190	0.000
93.	4062.980	-1.690	1758.463	0.000	1758.463	8.946	0.000	1751.190	0.000
94.	4060.544	-2.250	1764.081	0.000	1764.081	11.750	0.000	1751.190	0.000
95.	4057.420	-2.800	1771.256	0.000	1771.256	14.410	0.000	1751.190	0.000
96.	4053.613	-3.350	1779.951	0.000	1779.951	16.910	0.000	1751.190	0.000
97.	4049.130	-3.900	1790.124	0.000	1790.124	19.230	0.000	1751.190	0.000
98.	4043.982	-4.440	1801.725	0.000	1801.725	21.360	0.000	1751.190	0.000
99.	4038.176	-4.970	1814.699	0.000	1814.699	23.300	0.000	1751.190	0.000

Z-PLANE (XY-PLANE) LEAD SULPHIDE

	LNQVEL	LPH112	LPH113	FSRVEL	FSPH112	FSPH113	SSKVEL	SSPH112	SSPH113
100.	4031.726	-5.490	0.000	1828.984	25.050	0.000	1751.190	0.000	0.000
101.	4024.645	-6.010	0.000	1844.515	26.610	0.000	1751.190	-0.000	0.000
102.	4016.947	-6.510	0.000	1861.220	27.990	0.000	1751.190	0.000	0.000
103.	4008.649	-7.000	0.000	1879.025	29.200	0.000	1751.190	0.000	0.000
104.	3999.769	-7.480	0.000	1897.853	30.240	0.000	1751.190	-0.000	0.000
105.	3990.329	-7.940	0.000	1917.622	31.130	0.000	1751.190	0.000	0.000
106.	3980.351	-8.360	0.000	1938.246	31.860	0.000	1751.190	0.000	0.000
107.	3969.860	-8.710	0.000	1959.645	32.460	0.000	1751.190	0.000	0.000
108.	3958.884	-9.020	0.000	1981.726	32.920	0.000	1751.190	0.000	0.000
109.	3947.453	-9.260	0.000	2004.399	33.250	0.000	1751.190	0.000	0.000
110.	3935.595	-9.490	0.000	2027.575	33.470	0.000	1751.190	0.000	0.000
111.	3923.360	-9.700	0.000	2051.156	33.570	0.000	1751.190	0.000	0.000
112.	3910.774	-9.890	0.000	2075.054	33.550	0.000	1751.190	0.000	0.000
113.	3897.884	-10.060	0.000	2099.166	33.430	0.000	1751.190	0.000	0.000
114.	3884.736	-11.060	0.000	2123.396	33.200	0.000	1751.190	0.000	0.000
115.	3871.366	-11.250	0.000	2147.643	32.670	0.000	1751.190	0.000	0.000
116.	3857.884	-11.360	0.000	2171.804	32.430	0.000	1751.190	-0.000	0.000
117.	3844.291	-11.470	0.000	2195.774	31.880	0.000	1751.190	0.000	0.000
118.	3830.673	-11.500	0.000	2219.446	31.230	0.000	1751.190	0.000	0.000
119.	3817.101	-11.460	0.000	2242.709	30.460	0.000	1751.190	-0.000	0.000
120.	3803.648	-11.360	0.000	2265.450	29.560	0.000	1751.190	0.000	0.000
121.	3790.396	-11.220	0.000	2287.552	28.570	0.000	1751.190	-0.000	0.000
122.	3777.432	-10.980	0.000	2308.897	27.440	0.000	1751.190	0.000	0.000
123.	3764.846	-10.660	0.000	2329.364	26.160	0.000	1751.190	0.000	0.000
124.	3752.733	-10.250	0.000	2348.826	24.760	0.000	1751.190	-0.000	0.000
125.	3741.194	-9.750	0.000	2367.185	23.230	0.000	1751.190	0.000	0.000
126.	3730.330	-9.150	0.000	2384.248	21.530	0.000	1751.190	0.000	0.000
127.	3720.245	-8.460	0.000	2399.953	19.670	0.000	1751.190	0.000	0.000
128.	3711.043	-7.670	0.000	2414.159	17.660	0.000	1751.190	0.000	0.000
129.	3702.823	-6.750	0.000	2426.747	15.500	0.000	1751.190	0.000	0.000
130.	3695.681	-5.620	0.000	2437.610	13.180	0.000	1751.190	0.000	0.000
131.	3689.704	-4.760	0.000	2446.647	10.730	0.000	1751.190	0.000	0.000
132.	3684.970	-3.640	0.000	2453.772	8.160	0.000	1751.190	0.000	0.000
133.	3681.541	-2.460	0.000	2458.914	5.500	0.000	1751.190	0.000	0.000
134.	3679.464	-1.240	0.000	2462.021	2.770	0.000	1751.190	0.000	0.000
135.	3678.768	0.000	0.000	2463.060	-0.000	0.000	1751.190	0.000	0.000
136.	3679.464	1.240	0.000	2462.021	-2.770	0.000	1751.190	0.000	0.000
137.	3681.541	2.460	0.000	2458.914	-5.500	0.000	1751.190	0.000	0.000
138.	3684.970	3.640	0.000	2453.772	-8.160	0.000	1751.190	0.000	0.000
139.	3689.704	4.760	0.000	2446.647	-10.730	0.000	1751.190	-0.000	0.000
140.	3695.681	5.620	0.000	2437.610	-13.160	0.000	1751.190	0.000	0.000
141.	3702.823	6.750	0.000	2426.747	-15.500	0.000	1751.190	0.000	0.000
142.	3711.043	7.670	0.000	2414.159	-17.660	0.000	1751.190	-0.000	0.000
143.	3720.245	8.460	0.000	2399.953	-19.670	0.000	1751.190	0.000	0.000
144.	3730.330	9.150	0.000	2384.248	-21.530	0.000	1751.190	0.000	0.000
145.	3741.194	9.750	0.000	2367.185	-23.230	0.000	1751.190	0.000	0.000
146.	3752.733	10.250	0.000	2348.826	-24.760	0.000	1751.190	0.000	0.000
147.	3764.846	10.660	0.000	2329.364	-26.160	0.000	1751.190	0.000	0.000
148.	3777.432	10.980	0.000	2308.897	-27.440	0.000	1751.190	-0.000	0.000
149.	3790.396	11.220	0.000	2287.552	-28.570	0.000	1751.190	-0.000	0.000

Z-PLANE (XY-PLANE) LEAD SULPHIDE									
	LPMI12		LPMI13		FSRVEL		FSPMI12		FSPMI13
	LNGLVEL								
150.	3803.646	11.360	0.000	0.000	2265.450	-29.560	0.000	0.000	SSPMI12
151.	3817.101	11.460	0.000	0.000	2242.709	-30.460	0.000	0.000	SSPMI13
152.	3830.673	11.500	0.000	0.000	2219.446	-31.230	0.000	0.000	0.000
153.	3844.291	11.470	0.000	0.000	2195.774	-31.680	0.000	0.000	0.000
154.	3857.884	11.300	0.000	0.000	2171.804	-32.430	0.000	0.000	0.000
155.	3871.386	11.250	0.000	0.000	2147.643	-32.870	0.000	0.000	0.000
156.	3884.736	11.060	0.000	0.000	2123.396	-33.200	0.000	0.000	0.000
157.	3897.884	10.840	0.000	0.000	2099.166	-33.430	0.000	0.000	0.000
158.	3910.774	10.560	0.000	0.000	2075.054	-33.550	0.000	0.000	0.000
159.	3923.360	10.280	0.000	0.000	2051.158	-33.570	0.000	0.000	0.000
160.	3935.599	9.950	0.000	0.000	2027.575	-33.470	0.000	0.000	0.000
161.	3947.453	9.600	0.000	0.000	2004.399	-33.250	0.000	0.000	0.000
162.	3958.884	9.210	0.000	0.000	1981.726	-32.920	0.000	0.000	0.000
163.	3969.860	8.610	0.000	0.000	1959.645	-32.460	0.000	0.000	0.000
164.	3980.351	8.360	0.000	0.000	1938.246	-31.860	0.000	0.000	0.000
165.	3990.329	7.940	0.000	0.000	1917.622	-31.130	0.000	0.000	0.000
166.	3999.769	7.480	0.000	0.000	1897.853	-30.240	0.000	0.000	0.000
167.	4008.645	7.000	0.000	0.000	1879.025	-29.200	0.000	0.000	0.000
168.	4016.947	6.510	0.000	0.000	1861.220	-27.990	0.000	0.000	0.000
169.	4024.645	6.010	0.000	0.000	1844.515	-26.610	0.000	0.000	0.000
170.	4031.726	5.490	0.000	0.000	1828.984	-25.050	0.000	0.000	0.000
171.	4038.176	4.970	0.000	0.000	1814.695	-23.300	0.000	0.000	0.000
172.	4043.982	4.440	0.000	0.000	1801.725	-21.360	0.000	0.000	0.000
173.	4049.130	3.900	0.000	0.000	1790.124	-19.230	0.000	0.000	0.000
174.	4053.613	3.350	0.000	0.000	1779.951	-16.910	0.000	0.000	0.000
175.	4057.420	2.800	0.000	0.000	1771.256	-14.410	0.000	0.000	0.000
176.	4060.544	2.250	0.000	0.000	1764.061	-11.750	0.000	0.000	0.000
177.	4062.980	1.690	0.000	0.000	1758.463	-8.940	0.000	0.000	0.000
178.	4064.724	1.130	0.000	0.000	1754.429	-6.030	0.000	0.000	0.000
179.	4065.771	.560	0.000	0.000	1752.001	-3.030	0.000	0.000	0.000
180.	4066.120	-0.000	0.000	0.000	1751.190	0.000	0.000	0.000	0.000

111-PLANE LEAD SULPHIDE

BULK

	LNGVEL	LPMH12	LPMH13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	3678.768	0.000	0.000	2863.060	-0.000	0.000	1751.190	-0.000	0.000
1.	3678.058	.160	-1.760	2862.590	-1.250	1.070	1751.002	1.770	1.250
2.	3679.127	.320	-1.530	2861.181	-2.500	2.140	1753.075	3.520	2.450
3.	3679.573	.470	-1.280	2858.840	-3.740	3.200	1752.425	5.250	3.720
4.	3680.108	.620	-3.020	2855.577	-4.980	4.250	1750.731	6.940	5.230
5.	3680.965	.760	-3.750	2851.404	-6.160	5.280	1702.890	8.580	6.110
6.	3681.894	.890	-4.460	2846.341	-7.340	6.250	1707.775	10.150	7.280
7.	3682.965	1.010	-5.150	2840.406	-8.450	7.220	1703.935	11.660	8.370
8.	3684.162	1.120	-5.820	2833.631	-9.610	8.240	1701.746	13.090	9.430
9.	3685.472	1.210	-6.470	2826.030	-10.690	9.170	1700.380	14.440	10.470
10.	3686.879	1.290	-7.090	2817.660	-11.730	10.070	1700.005	15.690	11.420
11.	3688.366	1.350	-7.660	2808.534	-12.720	10.940	1700.906	16.820	12.330
12.	3689.916	1.400	-8.240	2800.696	-13.660	11.770	1702.005	17.910	13.150
13.	3691.510	1.450	-8.770	2800.194	-14.550	12.570	1703.457	18.970	14.000
14.	3693.131	1.450	-9.270	2877.070	-15.390	13.330	1707.056	19.720	14.740
15.	3694.760	1.450	-9.740	2865.376	-16.160	14.050	1704.435	20.470	15.420
16.	3696.380	1.430	-10.180	2853.167	-16.860	14.730	1701.732	21.100	16.020
17.	3697.974	1.400	-10.560	2840.505	-17.460	15.360	1704.402	21.610	16.520
18.	3699.523	1.350	-10.960	2827.460	-18.020	15.990	1707.024	21.990	17.120
19.	3701.013	1.290	-11.300	2814.110	-18.450	16.560	1701.069	22.240	17.570
20.	3702.427	1.220	-11.610	2800.545	-18.750	17.100	1704.726	22.330	17.900
21.	3703.752	1.130	-11.890	2800.884	-18.910	17.600	1702.404	22.240	18.300
22.	3704.974	1.030	-12.140	2873.249	-18.600	18.160	1702.207	21.940	18.580
23.	3706.082	.930	-12.360	2859.814	-18.590	18.450	1705.726	21.360	18.800
24.	3707.064	.810	-12.550	2846.792	-17.980	18.680	1700.624	20.430	18.970
25.	3707.912	.690	-12.710	2834.464	-17.590	18.920	1701.821	19.630	19.000
26.	3708.616	.560	-12.840	2823.200	-16.920	19.230	1702.540	19.100	19.100
27.	3709.171	.420	-12.940	2813.472	-15.260	19.550	1701.726	18.160	19.150
28.	3709.571	.260	-13.010	2805.853	-9.360	20.020	1704.091	10.320	19.150
29.	3709.812	.140	-13.050	2800.946	-5.010	20.160	1701.091	5.450	19.150
30.	3709.893	0.000	-13.070	2799.246	-0.000	20.210	1701.091	0.000	19.150
31.	3709.812	-.140	-13.050	2800.946	5.010	20.160	1701.091	5.450	19.150
32.	3709.571	-.260	-13.010	2805.853	9.360	20.020	1704.091	10.320	19.150
33.	3709.171	-.420	-12.940	2813.472	12.000	19.610	1702.540	14.160	19.150
34.	3708.616	-.560	-12.840	2823.200	15.260	19.230	1701.726	17.100	19.150
35.	3707.912	-.690	-12.710	2834.464	16.920	18.920	1701.821	19.030	19.090
36.	3707.064	-.810	-12.550	2846.792	17.980	18.680	1700.624	20.430	18.970
37.	3706.082	-.930	-12.360	2859.814	18.590	18.450	1705.726	21.360	18.800
38.	3704.974	-1.030	-12.140	2873.249	18.600	18.160	1702.207	21.940	18.580
39.	3703.752	-1.130	-11.890	2886.884	16.910	17.600	1702.404	22.240	18.300
40.	3702.427	-1.220	-11.610	2890.545	18.750	17.100	1704.726	22.330	17.900
41.	3701.013	-1.290	-11.300	2894.110	18.450	16.560	1701.069	22.240	17.570
42.	3699.523	-1.350	-10.960	2897.460	17.020	15.990	1707.024	21.990	17.120
43.	3697.974	-1.400	-10.560	2890.505	16.460	15.360	1704.402	21.610	16.620
44.	3696.381	-1.450	-10.180	2883.167	16.860	14.730	1701.732	21.100	16.020
45.	3694.760	-1.450	-9.740	2865.376	16.160	14.050	1704.435	20.470	15.420
46.	3693.131	-1.450	-9.270	2877.070	15.390	13.330	1707.056	19.720	14.740
47.	3691.510	-1.430	-8.770	2888.194	14.550	12.570	1703.457	18.970	14.000
48.	3689.916	-1.400	-8.240	2890.696	13.660	11.770	1702.005	17.910	13.150
49.	3688.366	-1.350	-7.660	2900.534	12.720	10.940	1700.906	16.820	12.330

111-PLANE LEAD SULPHIDE

	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
50.	3606.879	-7.090	2417.660	11.730	10.070	1796.805	-15.690	11.420
51.	3605.472	-1.210	2426.036	10.690	9.170	1760.380	-14.440	10.420
52.	3604.162	-5.820	2433.631	9.610	8.240	1780.746	-13.090	9.430
53.	3602.965	-1.010	2440.408	8.490	7.280	1773.935	-11.660	8.370
54.	3601.894	-6.990	2446.341	7.340	6.290	1767.975	-10.150	7.260
55.	3600.965	-3.750	2451.404	6.160	5.260	1762.090	-8.500	6.110
56.	3600.168	-3.020	2455.577	4.960	4.250	1756.701	-6.540	4.930
57.	3609.573	-4.70	2459.840	3.740	3.200	1751.425	-5.250	3.720
58.	3609.127	-1.530	2461.181	2.500	2.140	1753.075	-3.520	2.490
59.	3608.898	-0.160	2462.590	1.250	1.070	1751.662	-1.770	1.250
60.	3608.766	-0.000	2463.060	0.000	0.000	1751.190	0.000	0.000
61.	3608.856	.160	2462.590	-1.250	-1.070	1751.662	1.770	-1.250
62.	3609.127	.320	2461.182	-2.500	-2.140	1753.075	3.520	-2.490
63.	3609.572	.470	2459.840	-3.740	-3.200	1755.425	5.250	-3.720
64.	3608.186	.620	2455.577	-4.960	-4.250	1756.701	6.540	-4.930
65.	3600.965	.760	2451.404	-6.160	-5.260	1762.090	8.500	-6.110
66.	3601.894	.890	2446.341	-7.340	-6.290	1767.975	10.150	-7.260
67.	3602.965	1.010	2440.409	-8.490	-7.280	1773.935	11.660	-8.370
68.	3604.162	1.120	2433.631	-9.610	-8.240	1780.746	13.090	-9.430
69.	3605.472	1.210	2426.036	-10.690	-9.170	1780.380	14.440	-10.420
70.	3606.879	1.290	2417.660	-11.730	-10.070	1796.805	15.690	-11.420
71.	3608.366	1.350	2408.534	-12.720	-10.940	1805.986	16.850	-12.330
72.	3609.916	1.400	2398.696	-13.660	-11.770	1815.805	17.910	-13.130
73.	3691.510	1.430	2386.195	-14.550	-12.570	1826.456	18.870	-13.900
74.	3693.131	1.450	2377.070	-15.390	-13.330	1837.656	19.720	-14.740
75.	3694.760	1.460	2365.376	-16.160	-14.050	1849.435	20.470	-15.420
76.	3696.360	1.430	2353.167	-16.860	-14.730	1861.732	21.100	-16.060
77.	3697.973	1.400	2340.505	-17.480	-15.360	1874.485	21.610	-16.620
78.	3699.523	1.350	2327.460	-18.020	-15.950	1887.624	21.990	-17.120
79.	3701.013	1.290	2314.111	-18.450	-16.560	1901.069	22.240	-17.570
80.	3702.427	1.220	2300.549	-18.750	-17.100	1914.726	22.330	-17.980
81.	3703.752	1.130	2286.864	-18.910	-17.600	1928.484	22.240	-18.300
82.	3704.974	1.030	2273.250	-18.880	-18.060	1942.207	21.940	-18.560
83.	3706.082	.930	2259.814	-18.590	-18.490	1955.726	21.560	-18.890
84.	3707.064	.810	2246.792	-18.060	-18.860	1968.824	21.360	-19.190
85.	3707.911	.690	2234.464	-17.480	-19.160	1981.219	21.320	-19.410
86.	3708.616	.560	2223.200	-16.920	-19.410	1992.540	21.160	-19.580
87.	3709.171	.420	2213.473	-16.380	-19.610	2002.313	20.830	-19.710
88.	3709.571	.280	2205.653	-15.780	-19.760	2009.966	20.320	-19.810
89.	3709.812	.140	2200.948	-15.130	-19.860	2014.492	19.740	-19.880
90.	3709.893	0.000	2199.248	-14.440	-19.910	2016.596	19.000	-19.910
91.	3709.812	-.140	2200.948	-13.700	-19.910	2014.492	-18.490	-19.880
92.	3709.571	-.280	2205.653	-12.980	-19.760	2009.966	-17.710	-19.580
93.	3709.171	-.420	2213.473	-12.160	-19.410	2002.313	-16.890	-19.190
94.	3708.616	-.560	2223.200	-11.260	-18.910	1992.540	-15.980	-18.710
95.	3707.911	-.690	2234.464	-10.260	-18.260	1981.219	-14.930	-18.160
96.	3707.064	-.810	2246.792	-9.160	-17.480	1968.824	-13.740	-17.410
97.	3706.082	-.930	2259.814	-7.980	-16.560	1955.726	-12.430	-16.620
98.	3704.974	-1.030	2273.250	-6.740	-15.560	1942.207	-10.940	-15.420
99.	3703.752	-1.130	2286.864	-5.480	-14.490	1928.484	-9.240	-14.740

111-PLANE LEAD SULPHIDE

BULK

	LMGVEL	LMPI12	LMPI13	FSPVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13
100.	3702.427	-1.220	11.610	2300.544	18.750	-17.100	1914.726	-22.330	-1.900
101.	3701.813	-1.250	11.300	2314.111	18.450	-16.500	1901.069	-22.240	-1.900
102.	3699.523	-1.350	10.960	2327.460	18.020	-15.590	1887.624	-21.620	-1.900
103.	3697.973	-1.400	10.560	2340.505	17.460	-14.730	1874.465	-21.100	-1.900
104.	3696.360	-1.430	10.160	2353.167	16.860	-14.050	1861.732	-20.470	-1.900
105.	3694.760	-1.450	9.740	2365.376	16.160	-13.330	1849.435	-19.720	-1.900
106.	3693.131	-1.450	9.270	2377.070	15.390	-12.570	1837.650	-18.870	-1.900
107.	3691.510	-1.430	8.770	2388.195	14.550	-11.770	1826.450	-17.910	-1.900
108.	3689.916	-1.400	8.240	2398.696	13.660	-10.940	1815.865	-16.850	-1.900
109.	3688.366	-1.350	7.680	2408.534	12.720	-10.070	1805.805	-15.690	-1.900
110.	3686.875	-1.290	7.090	2417.660	11.730	-9.170	1796.300	-14.440	-1.900
111.	3685.472	-1.210	6.470	2426.036	10.690	-8.240	1788.300	-13.090	-1.900
112.	3684.162	-1.120	5.820	2433.631	9.610	-7.260	1780.746	-11.660	-1.900
113.	3682.964	-1.010	5.150	2440.405	8.490	-6.290	1773.935	-10.150	-1.900
114.	3681.894	-0.890	4.460	2446.341	7.340	-5.260	1767.975	-8.580	-1.900
115.	3680.965	-0.760	3.750	2451.404	6.160	-4.250	1762.890	-6.940	-1.900
116.	3680.168	-0.620	3.020	2455.577	4.960	-3.200	1758.701	-5.250	-1.900
117.	3679.572	-0.470	2.280	2458.840	3.740	-2.140	1755.425	-3.520	-1.900
118.	3679.127	-0.320	1.530	2461.102	2.500	-1.070	1753.075	-1.770	-1.900
119.	3678.858	-0.160	0.760	2462.590	1.250	0.000	1751.662	-0.000	-1.900
120.	3678.764	0.000	-0.000	2463.060	-0.000	1.070	1751.190	1.770	-1.900
121.	3678.858	0.160	-0.760	2462.590	-1.250	2.140	1751.662	3.520	-1.900
122.	3679.127	0.320	-1.530	2461.102	-2.500	3.200	1753.075	5.250	-1.900
123.	3679.572	0.470	-2.280	2458.840	-3.740	4.250	1755.425	6.940	-1.900
124.	3680.168	0.620	-3.020	2455.577	-4.960	5.260	1758.701	8.580	-1.900
125.	3680.965	0.760	-3.750	2451.404	-6.160	6.290	1762.890	10.150	-1.900
126.	3681.894	0.890	-4.460	2446.341	-7.340	7.260	1767.975	11.660	-1.900
127.	3682.964	1.010	-5.150	2440.405	-8.490	8.240	1773.935	13.090	-1.900
128.	3684.162	1.120	-5.820	2433.631	-9.610	9.170	1780.746	14.440	-1.900
129.	3685.472	1.210	-6.470	2426.036	-10.690	10.070	1788.300	15.690	-1.900
130.	3686.875	1.290	-7.090	2417.660	-11.730	10.940	1796.300	16.850	-1.900
131.	3688.366	1.350	-7.680	2408.534	-12.720	11.770	1805.805	17.910	-1.900
132.	3689.916	1.400	-8.240	2398.696	-13.660	12.570	1815.865	18.870	-1.900
133.	3691.510	1.430	-8.770	2388.195	-14.550	13.330	1826.450	19.720	-1.900
134.	3693.131	1.450	-9.270	2377.070	-15.390	14.050	1837.650	20.470	-1.900
135.	3694.760	1.450	-9.740	2365.376	-16.160	14.730	1849.435	21.100	-1.900
136.	3696.360	1.430	-10.160	2353.167	-16.860	15.380	1861.732	21.620	-1.900
137.	3697.974	1.400	-10.560	2340.505	-17.460	16.050	1874.465	22.240	-1.900
138.	3699.523	1.350	-10.960	2327.460	-18.020	16.590	1887.624	22.860	-1.900
139.	3701.013	1.290	-11.300	2314.110	-18.450	17.100	1901.069	23.330	-1.900
140.	3702.427	1.220	-11.610	2300.544	-18.750	17.660	1914.726	23.720	-1.900
141.	3703.752	1.130	-11.890	2286.884	-18.910	18.060	1928.464	24.030	-1.900
142.	3704.974	1.030	-12.140	2273.249	-18.860	18.450	1942.207	24.260	-1.900
143.	3706.082	0.930	-12.360	2259.814	-18.590	18.860	1955.926	24.430	-1.900
144.	3707.064	0.810	-12.550	2246.792	-18.200	19.230	1969.624	24.540	-1.900
145.	3707.912	0.690	-12.710	2234.464	-17.690	19.550	1981.219	24.590	-1.900
146.	3708.616	0.560	-12.840	2223.200	-17.060	19.820	1992.540	24.590	-1.900
147.	3709.171	0.420	-12.940	2213.472	-16.330	20.020	2002.313	24.540	-1.900
148.	3709.571	0.280	-13.010	2205.853	-15.500	20.160	2009.366	24.430	-1.900
149.	3709.812	0.140	-13.050	2200.948	-14.570	20.220	2014.691	24.260	-1.900

111-PLANE LEAD SULPHIDE

	LNGVEL	LPH112	LPH113	FSRWEL	FSPH112	FSPH113	SSRWEL	SSPH112	SSPH113
150.	3709.893	-0.000	-13.070	2199.246	0.000	20.210	2016.598	0.000	19.100
151.	3709.812	-1.140	-13.050	2200.948	5.010	20.160	2014.091	-5.450	19.100
152.	3709.571	-2.260	-13.010	2205.653	9.360	20.020	2009.966	-10.320	19.100
153.	3709.171	-4.420	-12.940	2213.472	12.600	19.810	2002.313	-14.160	19.190
154.	3708.616	-5.560	-12.840	2223.200	15.260	19.560	1992.540	-17.000	19.100
155.	3707.912	-6.890	-12.710	2234.464	18.920	19.230	1981.219	-19.030	19.030
156.	3707.064	-8.010	-12.550	2246.792	17.900	18.600	1966.054	-20.430	18.970
157.	3706.082	-9.930	-12.360	2259.814	18.550	18.450	1955.726	-21.360	18.800
158.	3704.974	-1.030	-12.140	2273.249	18.880	18.060	1942.207	-21.940	18.580
159.	3703.752	-1.130	-11.890	2286.884	18.910	17.600	1928.404	-22.240	18.300
160.	3702.427	-1.220	-11.610	2300.549	18.750	17.100	1914.726	-22.330	17.900
161.	3701.013	-1.290	-11.300	2314.110	18.450	16.500	1901.069	-22.240	17.570
162.	3699.523	-1.350	-10.980	2327.460	18.020	15.950	1887.624	-21.990	17.120
163.	3697.974	-1.400	-10.580	2340.505	17.480	15.360	1874.485	-21.610	16.620
164.	3696.380	-1.430	-10.180	2353.167	16.860	14.730	1861.732	-21.100	16.050
165.	3694.760	-1.450	-9.740	2365.376	16.160	14.050	1849.435	-20.470	15.420
166.	3693.131	-1.450	-9.270	2377.070	15.390	13.330	1837.050	-19.720	14.740
167.	3691.510	-1.430	-8.770	2388.194	14.550	12.570	1825.457	-18.870	14.030
168.	3689.916	-1.400	-8.240	2398.696	13.660	11.770	1815.805	-17.910	13.310
169.	3688.366	-1.350	-7.680	2408.534	12.720	10.940	1805.936	-16.850	12.530
170.	3686.875	-1.290	-7.090	2417.660	11.730	10.070	1795.805	-15.690	11.720
171.	3685.472	-1.210	-6.470	2426.036	10.690	9.170	1785.380	-14.440	10.850
172.	3684.162	-1.120	-5.820	2433.631	9.610	8.240	1774.746	-13.090	9.930
173.	3682.965	-1.010	-5.150	2440.406	8.450	7.260	1773.935	-11.660	8.970
174.	3681.894	-0.900	-4.460	2446.341	7.340	6.290	1767.975	-10.150	8.010
175.	3680.965	-0.760	-3.750	2451.404	6.160	5.260	1762.490	-8.580	7.010
176.	3680.188	-0.620	-3.020	2455.577	4.960	4.250	1756.701	-6.940	6.010
177.	3679.573	-0.470	-2.280	2458.840	3.740	3.200	1755.425	-5.250	5.010
178.	3679.127	-0.320	-1.530	2461.181	2.500	2.140	1753.875	-3.520	4.010
179.	3678.856	-0.160	-0.760	2462.590	1.250	1.170	1751.662	-1.770	3.010
180.	3678.768	0.000	0.000	2463.060	-0.000	-0.000	1751.190	0.000	2.010

110-PLANE LEAD SULPHIDE

BULK

	LNQVEL	LPN112	LPN113	FSRVEL	FSPN112	FSPN113	SSRVEL	SSPN112	SSPN113
0.	3540.245	-0.000	0.000	2250.930	-15.600	0.000	2250.921	15.600	-0.000
1.	3540.685	.830	0.000	2239.872	-15.520	-0.000	2261.230	13.730	0.000
2.	3542.051	1.700	-0.000	2228.636	-16.230	-0.000	2270.182	11.770	0.000
3.	3544.368	2.600	-0.000	2217.233	-16.530	-0.000	2277.719	9.730	0.000
4.	3547.666	3.510	-0.000	2205.675	-16.810	0.000	2283.745	7.620	-0.000
5.	3551.966	4.430	0.000	2193.972	-17.090	-0.000	2288.376	5.460	-0.000
6.	3557.275	5.350	-0.000	2182.139	-17.350	-0.000	2292.447	3.300	0.000
7.	3563.584	6.240	-0.000	2170.186	-17.590	-0.000	2292.996	1.130	0.000
8.	3570.878	7.110	0.000	2158.126	-17.820	0.000	2293.031	-1.030	0.000
9.	3579.130	7.950	-0.000	2145.973	-18.040	-0.000	2291.271	-3.120	0.000
10.	3588.303	8.730	-0.000	2133.739	-18.230	-0.000	2288.046	-5.210	0.000
11.	3598.352	9.460	0.000	2121.439	-18.420	-0.000	2282.299	-7.210	0.000
12.	3609.223	10.140	0.000	2109.087	-18.560	-0.000	2278.501	-9.120	0.000
13.	3620.855	10.740	0.000	2096.696	-18.730	-0.000	2271.550	-10.540	-0.000
14.	3633.184	11.290	-0.000	2084.281	-18.850	-0.000	2263.274	-12.660	0.000
15.	3646.142	11.760	-0.000	2071.857	-18.960	-0.000	2253.824	-14.280	-0.000
16.	3659.658	12.170	-0.000	2059.440	-19.050	0.000	2243.279	-15.790	0.000
17.	3673.659	12.510	-0.000	2047.043	-19.110	-0.000	2233.705	-17.190	-0.000
18.	3688.075	12.760	-0.000	2034.684	-19.150	0.000	2219.196	-18.490	0.000
19.	3702.834	12.990	-0.000	2022.378	-19.170	-0.000	2205.827	-19.600	-0.000
20.	3717.866	13.140	-0.000	2010.142	-19.170	-0.000	2191.662	-20.770	0.000
21.	3733.104	13.230	-0.000	1997.990	-19.140	-0.000	2176.041	-21.760	0.000
22.	3748.682	13.270	-0.000	1985.941	-19.090	-0.000	2161.305	-22.640	0.000
23.	3763.935	13.260	-0.000	1974.010	-19.000	-0.000	2145.394	-23.440	-0.000
24.	3779.415	13.200	-0.000	1962.214	-18.900	-0.000	2128.945	-24.140	0.000
25.	3794.852	13.090	-0.000	1950.571	-18.760	-0.000	2112.117	-24.750	0.000
26.	3810.195	12.940	-0.000	1939.097	-18.590	-0.000	2094.303	-25.270	0.000
27.	3825.403	12.760	-0.000	1927.810	-18.390	-0.000	2077.619	-25.700	0.000
28.	3840.420	12.540	-0.000	1916.727	-18.160	-0.000	2060.097	-26.050	0.000
29.	3855.202	12.280	-0.000	1905.865	-17.900	-0.000	2042.469	-26.310	0.000
30.	3869.711	12.000	-0.000	1895.241	-17.610	-0.000	2024.063	-26.490	0.000
31.	3883.905	11.650	-0.000	1884.872	-17.280	-0.000	2007.286	-26.580	0.000
32.	3897.750	11.350	-0.000	1874.775	-16.920	-0.000	1989.032	-26.580	0.000
33.	3911.212	10.990	-0.000	1864.967	-16.530	0.000	1972.559	-26.490	0.000
34.	3924.258	10.610	-0.000	1855.464	-16.100	-0.000	1955.535	-26.310	0.000
35.	3936.860	10.210	-0.000	1846.284	-15.630	-0.000	1938.023	-26.040	0.000
36.	3948.991	9.790	-0.000	1837.441	-15.130	-0.000	1922.464	-25.600	0.000
37.	3960.626	9.350	-0.000	1828.953	-14.590	-0.000	1906.579	-25.210	0.000
38.	3971.740	8.690	-0.000	1820.833	-14.010	-0.000	1891.167	-24.650	0.000
39.	3982.314	8.430	-0.000	1813.098	-13.400	-0.000	1876.304	-23.900	0.000
40.	3992.327	7.950	-0.000	1805.761	-12.750	-0.000	1862.047	-23.210	0.000
41.	4001.761	7.450	-0.000	1798.836	-12.070	-0.000	1848.450	-22.330	0.000
42.	4010.599	6.950	-0.000	1792.337	-11.350	-0.000	1835.563	-21.340	0.000
43.	4018.826	6.440	-0.000	1786.277	-10.610	-0.000	1823.437	-20.230	-0.000
44.	4026.426	5.920	-0.000	1780.666	-9.820	-0.000	1812.119	-19.020	0.000
45.	4033.392	5.390	-0.000	1775.517	-9.010	-0.000	1801.653	-17.690	0.000
46.	4039.709	4.850	-0.000	1770.839	-8.170	-0.000	1792.080	-16.240	0.000
47.	4045.366	4.310	-0.000	1766.842	-7.310	-0.000	1783.430	-14.700	0.000
48.	4050.357	3.770	-0.000	1762.935	-6.420	-0.000	1775.764	-13.040	0.000
49.	4054.672	3.220	-0.000	1759.725	-5.500	-0.000	1769.067	-11.300	-0.000

110-PLANE LEAD SULPHIDE

BULK

	LNGVEL	LPHI12	LPHI13	FSPVEL	FSPH12	FSPH13	SSKVEL	SSPH12	SSPH13
50.	4050.306	2.660	-0.000	1757.019	-4.570	-0.000	1633.435	-9.460	0.000
51.	4061.252	2.100	-0.000	1754.823	-3.620	-0.000	1550.033	-7.560	0.000
52.	4063.507	1.540	-0.000	1753.141	-2.660	-0.000	1550.296	-5.560	0.000
53.	4065.066	.900	-0.000	1751.976	-1.700	-0.000	1552.047	-3.570	0.000
54.	4065.931	.420	-0.000	1751.331	-1.260	-0.000	1551.488	-1.520	0.000
55.	4066.096	-.150	-0.000	1751.228	-.260	0.000	1551.236	-.260	0.000
56.	4065.562	-.710	-0.000	1751.607	1.240	0.000	1552.064	2.600	0.000
57.	4064.331	-1.280	-0.000	1752.526	2.210	0.000	1544.005	4.640	0.000
58.	4062.403	-1.840	-0.000	1753.965	3.170	0.000	1557.030	6.630	0.000
59.	4059.782	-2.400	-0.000	1755.919	4.130	0.000	1561.131	8.570	0.000
60.	4056.472	-2.950	-0.000	1758.385	5.070	0.000	1566.290	10.440	0.000
61.	4052.476	-3.510	-0.000	1761.350	5.950	0.000	1572.406	12.230	0.000
62.	4047.806	-4.060	-0.000	1764.831	6.840	0.000	1579.093	13.530	0.000
63.	4042.482	-4.600	-0.000	1768.796	7.770	0.000	1587.883	15.530	0.000
64.	4036.455	-5.140	-0.000	1773.250	8.620	0.000	1597.320	17.020	0.000
65.	4029.795	-5.670	-0.000	1778.176	9.440	0.000	1607.070	18.400	0.000
66.	4022.492	-6.190	-0.000	1783.572	10.240	0.000	1617.592	19.670	0.000
67.	4014.554	-6.710	-0.000	1789.421	11.010	0.000	1625.742	20.830	0.000
68.	4006.007	-7.220	-0.000	1795.715	11.740	0.000	1632.276	21.870	0.000
69.	3996.853	-7.720	-0.000	1802.440	12.440	0.000	1635.544	22.810	0.000
70.	3987.111	-8.200	-0.000	1809.584	13.100	0.000	1637.746	23.630	0.000
71.	3976.800	-8.660	-0.000	1817.133	13.730	0.000	1639.760	24.350	0.000
72.	3965.936	-9.110	-0.000	1825.073	14.320	0.000	1641.519	24.960	0.000
73.	3954.546	-9.580	-0.000	1833.390	14.860	0.000	1643.061	25.470	0.000
74.	3942.646	-10.010	-0.000	1842.067	15.400	0.000	1644.489	25.960	0.000
75.	3930.263	-10.420	-0.000	1851.090	15.860	0.000	1645.805	26.420	0.000
76.	3917.423	-10.810	-0.000	1860.442	16.330	0.000	1646.996	26.850	0.000
77.	3904.154	-11.190	-0.000	1870.108	16.740	0.000	1647.962	27.250	0.000
78.	3890.486	-11.530	-0.000	1880.071	17.120	0.000	1648.704	27.620	0.000
79.	3876.452	-11.860	-0.000	1890.314	17.460	0.000	1649.232	27.970	0.000
80.	3862.087	-12.150	-0.000	1900.820	17.770	0.000	1649.557	28.300	0.000
81.	3847.425	-12.420	0.000	1911.572	18.050	0.000	1649.684	28.600	0.000
82.	3832.517	-12.660	-0.000	1922.553	18.290	0.000	1649.612	28.870	0.000
83.	3817.356	-12.860	-0.000	1933.746	18.500	0.000	1649.353	29.110	0.000
84.	3802.110	-13.030	-0.000	1945.133	18.680	0.000	1648.905	29.320	0.000
85.	3786.705	-13.150	-0.000	1956.635	18.830	0.000	1648.273	29.500	0.000
86.	3771.245	-13.230	-0.000	1968.424	18.960	0.000	1647.462	29.650	0.000
87.	3755.772	-13.270	0.000	1980.293	19.050	0.000	1646.488	29.780	0.000
88.	3740.349	-13.260	-0.000	1992.284	19.120	0.000	1645.364	29.890	0.000
89.	3725.037	-13.150	-0.000	2004.394	19.160	0.000	1644.105	29.970	0.000
90.	3709.899	-13.070	0.000	2016.593	19.180	0.000	1642.723	30.020	0.000
91.	3695.003	-12.850	0.000	2028.866	19.170	0.000	1641.233	30.040	0.000
92.	3680.416	-12.640	-0.000	2041.204	19.140	0.000	1639.636	30.030	0.000
93.	3666.210	-12.330	0.000	2053.585	19.060	0.000	1637.936	30.000	0.000
94.	3652.456	-11.960	-0.000	2065.994	19.000	0.000	1636.136	29.950	0.000
95.	3639.226	-11.520	0.000	2078.417	18.910	0.000	1634.236	29.870	0.000
96.	3626.552	-11.010	-0.000	2090.846	18.790	0.000	1632.236	29.750	0.000
97.	3614.622	-10.430	-0.000	2103.286	18.650	0.000	1630.136	29.600	0.000
98.	3603.384	-9.750	0.000	2115.615	18.500	0.000	1627.936	29.420	0.000
99.	3592.941	-9.060	0.000	2127.941	18.320	0.000	1625.636	29.200	0.000

110-PLANE LEAD SULPHIDE

	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
108.	3583.344	0.000	2140.208	10.130	-0.000	2230.370	4.130	0.000
109.	3574.855	0.000	2152.501	17.920	-0.000	2292.526	2.030	0.000
109.	3566.905	0.000	2164.506	17.700	0.000	2293.200	-1.110	0.000
109.	3560.129	0.000	2176.511	17.460	-0.000	2292.368	-2.260	0.000
109.	3554.348	0.000	2188.516	17.210	-0.000	2290.016	-4.450	0.000
109.	3545.572	0.000	2200.160	16.940	-0.000	2286.146	-6.610	0.000
109.	3545.402	0.000	2211.796	16.660	-0.000	2280.771	-8.740	0.000
109.	3541.023	0.000	2223.274	16.370	-0.000	2273.919	-10.810	0.000
109.	3541.215	0.000	2234.590	16.070	-0.000	2265.629	-12.610	0.000
109.	3540.343	0.000	2245.733	15.750	-0.000	2255.952	-14.730	0.000
110.	3540.365	0.000	2256.693	15.420	0.000	2244.953	-16.540	0.000
111.	3541.233	0.000	2267.455	15.080	0.000	2232.704	-18.250	0.000
111.	3542.890	0.000	2278.020	14.730	0.000	2214.205	-19.640	0.000
113.	3545.275	0.000	2288.366	14.370	0.000	2204.764	-21.310	0.000
114.	3548.323	0.000	2298.466	14.010	-0.000	2189.297	-22.860	0.000
115.	3551.969	0.000	2308.577	13.630	0.000	2172.920	-23.860	0.000
115.	3556.143	0.000	2318.024	13.240	-0.000	2155.755	-24.570	0.000
117.	3560.779	0.000	2327.419	12.850	0.000	2137.905	-25.550	0.000
118.	3565.810	0.000	2336.555	12.450	0.000	2119.476	-26.800	0.000
119.	3571.170	0.000	2345.424	12.040	0.000	2100.572	-27.530	0.000
120.	3576.795	0.000	2354.017	11.630	-0.000	2081.299	-28.130	0.000
121.	3582.627	0.000	2362.328	11.200	-0.000	2061.761	-28.620	0.000
121.	3586.606	0.000	2370.344	10.760	-0.000	2042.062	-29.590	0.000
123.	3594.679	0.000	2376.073	10.340	-0.000	2022.305	-29.230	0.000
124.	3600.793	0.000	2385.495	9.900	0.000	2002.591	-29.360	0.000
125.	3606.901	0.000	2392.607	9.460	0.000	1983.010	-29.360	0.000
126.	3612.958	0.000	2399.405	9.010	-0.000	1963.696	-29.230	0.000
127.	3618.921	0.000	2405.881	8.550	-0.000	1944.686	-28.590	0.000
128.	3624.752	0.000	2412.032	8.090	0.000	1926.120	-28.070	0.000
129.	3630.416	0.000	2417.852	7.630	-0.000	1908.072	-27.400	0.000
130.	3635.879	0.000	2423.337	7.160	0.000	1890.633	-26.590	0.000
131.	3641.111	0.000	2428.481	6.690	0.000	1873.889	-25.820	0.000
132.	3646.084	0.000	2433.282	6.220	0.000	1857.923	-24.490	0.000
133.	3650.774	0.000	2437.734	5.740	0.000	1842.615	-23.210	0.000
134.	3655.158	0.000	2441.836	5.260	-0.000	1826.641	-21.790	0.000
135.	3659.215	0.000	2445.502	4.780	-0.000	1810.473	-20.130	0.000
136.	3662.927	0.000	2448.972	4.290	0.000	1792.420	-18.340	0.000
137.	3666.277	0.000	2452.001	3.810	0.000	1782.656	-16.390	0.000
138.	3669.252	0.000	2454.667	3.320	-0.000	1774.136	-14.200	0.000
139.	3671.840	0.000	2456.970	2.830	0.000	1766.406	-12.030	0.000
140.	3674.029	0.000	2458.905	2.340	0.000	1751.009	-9.640	0.000
141.	3675.811	0.000	2460.473	1.850	-0.000	1736.472	-7.150	0.000
142.	3677.179	0.000	2461.672	1.350	0.000	1722.378	-4.500	0.000
143.	3678.127	0.000	2462.501	.860	-0.000	1708.573	-1.950	0.000
144.	3678.693	0.000	2462.960	.360	0.000	1695.239	.700	0.000
145.	3678.793	0.000	2463.047	-.130	0.000	1682.320	3.340	0.000
146.	3678.428	0.000	2462.764	-.620	0.000	1670.810	5.950	0.000
147.	3677.679	0.000	2462.110	-1.120	-0.000	1660.696	8.400	0.000
148.	3676.506	0.000	2461.085	-1.610	-0.000	1653.956	10.920	0.000
149.	3674.921	0.000	2459.691	-2.110	0.000			

110-PLANE LEAD SULPHIDE									
	LNGVEL	LPM12	LPM13	FSRVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13
150.	3672.923	-1.970	0.000	2657.929	-2.600	0.000	1770.201	13.231	0.000
151.	3670.523	-2.320	0.000	2655.800	-3.090	0.000	1778.476	15.410	0.000
152.	3667.729	-2.670	0.000	2653.305	-3.580	-0.000	1787.689	17.440	0.000
153.	3664.554	-3.010	0.000	2650.446	-4.060	-0.000	1796.061	19.310	0.000
154.	3661.011	-3.330	0.000	2647.227	-4.550	0.000	1805.627	21.010	0.000
155.	3657.114	-3.650	0.000	2643.649	-5.030	-0.000	1822.296	22.540	0.000
156.	3652.843	-3.940	0.000	2639.714	-5.510	0.000	1836.004	23.910	0.000
157.	3648.335	-4.220	0.000	2635.427	-5.950	0.000	1850.600	25.110	0.000
158.	3643.492	-4.480	0.000	2630.790	-6.470	0.000	1868.231	26.150	0.000
159.	3638.379	-4.720	0.000	2625.800	-6.940	0.000	1882.036	27.040	0.000
160.	3633.021	-4.930	0.000	2620.483	-7.410	0.000	1899.759	27.770	0.000
161.	3627.446	-5.120	0.000	2614.821	-7.870	-0.000	1917.531	28.360	0.000
162.	3621.692	-5.290	0.000	2608.826	-8.340	-0.000	1935.065	28.810	0.000
163.	3615.766	-5.400	0.000	2602.502	-8.790	0.000	1954.671	29.130	0.000
164.	3609.769	-5.450	0.000	2595.855	-9.250	0.000	1973.858	29.320	0.000
165.	3603.680	-5.500	0.000	2588.691	-9.690	0.000	1993.329	29.370	0.000
166.	3597.563	-5.560	0.000	2581.614	-10.130	0.000	2012.909	29.310	0.000
167.	3591.464	-5.530	0.000	2574.032	-10.570	0.000	2032.736	29.120	0.000
168.	3585.434	-5.460	0.000	2566.150	-11.000	0.000	2052.477	28.810	0.000
169.	3579.526	-5.330	0.000	2557.975	-11.430	0.000	2072.104	28.360	0.000
170.	3573.786	-5.150	0.000	2549.514	-11.850	0.000	2091.515	27.830	0.000
171.	3568.302	-4.910	0.000	2540.775	-12.260	0.000	2110.806	27.180	0.000
172.	3563.106	-4.620	-0.000	2531.764	-12.660	0.000	2129.272	26.360	0.000
173.	3558.278	-4.260	0.000	2522.490	-13.060	0.000	2147.409	25.450	0.000
174.	3553.877	-3.840	-0.000	2512.961	-13.450	0.000	2164.910	24.410	0.000
175.	3549.974	-3.360	-0.000	2503.186	-13.830	-0.000	2181.671	23.250	0.000
176.	3546.635	-2.810	-0.000	2493.172	-14.200	-0.000	2197.241	21.980	0.000
177.	3543.929	-2.150	0.000	2482.930	-14.570	-0.000	2212.570	20.590	0.000
178.	3541.920	-1.520	0.000	2472.470	-14.920	-0.000	2226.510	19.010	0.000
179.	3540.673	-0.750	-0.000	2461.799	-15.260	-0.000	2239.323	17.360	0.000
180.	3540.245	-0.000	-0.000	2250.930	-15.600	-0.000	2250.921	15.600	0.000

BULK

X-PLANE (VZ-PLANE) LITHIUM NIOBATE (SMITH AND WELSH)

BULK

	LNGL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SRVEL	SSPH12	SSPH13
0.	6883.076	9.360	0.000	4496.162	-12.090	-0.000	3962.377	6.660	-0.000
1.	6983.291	9.660	0.000	4478.837	-12.760	-0.000	3970.326	6.440	-0.000
2.	6924.136	9.910	0.000	4460.756	-13.360	-0.000	3978.029	6.230	-0.000
3.	6945.489	10.090	0.000	4441.693	-13.900	-0.000	3985.478	6.010	-0.000
4.	6967.227	10.200	0.000	4422.441	-14.370	-0.000	3992.666	5.780	-0.000
5.	6989.231	10.270	0.000	4402.550	-14.660	-0.000	3999.565	5.550	-0.000
6.	7011.387	10.260	0.000	4382.286	-14.910	-0.000	4006.429	5.310	-0.000
7.	7033.585	10.240	0.000	4361.632	-15.090	-0.000	4012.590	5.070	-0.000
8.	7055.721	10.160	0.000	4341.285	-15.160	-0.000	4018.662	4.830	-0.000
9.	7077.696	10.040	0.000	4320.756	-15.190	-0.000	4024.435	4.590	-0.000
10.	7099.416	9.670	0.000	4300.354	-15.140	-0.000	4029.916	4.330	-0.000
11.	7120.800	9.670	0.000	4280.187	-15.016	-0.000	4035.066	4.070	-0.000
12.	7141.759	9.440	0.000	4260.336	-14.810	-0.000	4039.945	3.820	-0.000
13.	7162.221	9.170	0.000	4240.901	-14.540	-0.000	4044.469	3.550	-0.000
14.	7182.115	8.860	0.000	4221.957	-14.220	-0.000	4048.712	3.290	-0.000
15.	7201.377	8.560	0.000	4203.562	-13.830	-0.000	4052.610	3.020	-0.000
16.	7219.948	8.220	0.000	4185.844	-13.400	-0.000	4056.160	2.750	-0.000
17.	7237.774	7.860	0.000	4168.804	-12.910	-0.000	4059.418	2.460	-0.000
18.	7254.806	7.480	0.000	4152.517	-12.370	-0.000	4062.321	2.210	-0.000
19.	7271.005	7.060	0.000	4137.029	-11.790	-0.000	4064.866	1.930	-0.000
20.	7286.329	6.670	0.000	4122.381	-11.180	-0.000	4067.111	1.660	-0.000
21.	7300.746	6.250	0.000	4108.604	-10.530	-0.000	4069.933	1.380	-0.000
22.	7314.227	5.820	0.000	4095.723	-9.860	-0.000	4070.931	1.100	-0.000
23.	7326.751	5.360	0.000	4083.754	-9.170	-0.000	4071.723	0.820	-0.000
24.	7338.290	4.930	0.000	4072.706	-8.470	-0.000	4072.368	0.540	-0.000
25.	7348.854	4.480	0.000	4062.587	-7.760	-0.000	4073.066	0.260	-0.000
26.	7358.411	4.030	0.000	4053.363	-7.050	-0.000	4073.215	-0.020	-0.000
27.	7366.965	3.580	0.000	4045.065	-6.350	-0.000	4073.017	-0.300	-0.000
28.	7374.516	3.140	0.000	4037.671	-5.660	-0.000	4072.469	-0.500	-0.000
29.	7381.070	2.690	0.000	4031.114	-4.990	-0.000	4071.975	-0.660	-0.000
30.	7386.635	2.250	0.000	4025.377	-4.350	-0.000	4070.333	-1.140	-0.000
31.	7391.226	1.830	0.000	4020.420	-3.730	-0.000	4068.746	-1.420	-0.000
32.	7394.863	1.410	0.000	4016.192	-3.170	-0.000	4066.615	-1.700	-0.000
33.	7397.569	1.000	0.000	4012.639	-2.650	-0.000	4064.541	-1.970	-0.000
34.	7399.372	0.600	0.000	4009.699	-2.170	-0.000	4061.926	-2.250	-0.000
35.	7400.304	0.230	0.000	4007.304	-1.760	-0.000	4059.977	-2.520	-0.000
36.	7400.402	-0.140	0.000	4005.383	-1.400	-0.000	4057.692	-2.790	-0.000
37.	7399.706	-0.460	0.000	4003.657	-1.110	-0.000	4052.075	-3.060	-0.000
38.	7398.263	-0.800	0.000	4002.645	-0.890	-0.000	4049.130	-3.330	-0.000
39.	7396.121	-1.100	0.000	4001.662	-0.740	-0.000	4045.661	-3.590	-0.000
40.	7393.333	-1.370	0.000	4000.618	-0.660	-0.000	4043.273	-3.850	-0.000
41.	7389.954	-1.620	0.000	4000.023	-0.660	-0.000	4039.469	-4.110	-0.000
42.	7386.045	-1.850	0.000	3999.184	-0.730	-0.000	4035.155	-4.370	-0.000
43.	7381.667	-2.040	0.000	3998.206	-0.800	-0.000	4033.635	-4.620	-0.000
44.	7376.886	-2.210	0.000	3997.000	-1.110	-0.000	4031.912	-4.860	-0.000
45.	7371.766	-2.340	0.000	3995.466	-1.420	-0.000	4011.702	-5.110	-0.000
46.	7366.377	-2.450	0.000	3993.521	-1.800	-0.000	4005.300	-5.350	-0.000
47.	7360.786	-2.530	0.000	3991.070	-2.240	-0.000	3998.617	-5.560	-0.000
48.	7355.063	-2.570	0.000	3988.032	-2.760	-0.000	3991.654	-5.810	-0.000
49.	7349.277	-2.590	0.000	3984.327	-3.340	-0.000	3984.434	-6.040	-0.000

X-PLANE (YZ-PLANE) LITHIUM NIOBATE (SMITH AND WELSH)

BULK

	LPM112	LPM113	FSRVEL	FSPM112	FSPM113	SSRVEL	SSPM112	SSPM113
50.	7343.494	0.000	3979.881	-3.980	0.000	3976.948	-6.260	0.000
51.	7337.781	-2.530	3974.628	-4.660	0.000	3969.204	-6.470	0.000
52.	7332.199	0.000	3968.511	-5.420	0.000	3961.226	-6.660	0.000
53.	7326.811	-2.360	3961.479	-6.190	0.000	3953.006	-6.840	0.000
54.	7321.670	-2.240	3953.496	-7.000	0.000	3944.559	-7.090	0.000
55.	7316.828	-2.100	3944.532	-7.820	0.000	3935.093	-7.280	0.000
56.	7312.331	-1.930	3934.572	-8.660	0.000	3927.016	-7.460	0.000
57.	7308.220	-1.750	3923.615	-9.500	0.000	3917.940	-7.640	0.000
58.	7304.526	-1.560	3911.670	-10.320	0.000	3908.072	-7.810	0.000
59.	7301.282	-1.360	3899.224	-11.120	0.000	3898.762	-7.980	0.000
60.	7298.503	-1.140	3884.929	-11.890	0.000	3888.606	-8.130	0.000
61.	7296.205	-9.920	3870.223	-12.620	0.000	3879.027	-8.280	0.000
62.	7294.395	-7.700	3854.712	-13.250	0.000	3869.900	-8.420	0.000
63.	7293.071	-4.900	3838.474	-13.890	0.000	3859.033	-8.550	0.000
64.	7292.226	-2.270	3821.603	-14.420	0.000	3849.640	-8.680	0.000
65.	7291.851	-0.070	3804.204	-14.970	0.000	3839.332	-8.790	0.000
66.	7291.923	0.130	3786.395	-15.210	0.000	3828.719	-8.900	0.000
67.	7292.415	0.310	3766.302	-15.460	0.000	3818.415	-9.000	0.000
68.	7293.308	0.480	3750.062	-15.590	0.000	3807.030	-9.080	0.000
69.	7294.559	0.640	3731.817	-15.610	0.000	3797.176	-9.160	0.000
70.	7296.134	0.780	3713.717	-15.500	0.000	3786.471	-9.220	0.000
71.	7297.993	0.690	3695.916	-15.280	0.000	3775.721	-9.280	0.000
72.	7300.095	0.990	3678.568	-14.890	0.000	3764.741	-9.330	0.000
73.	7302.395	1.070	3661.828	-14.360	0.000	3754.145	-9.360	0.000
74.	7304.850	1.130	3645.650	-13.730	0.000	3743.344	-9.380	0.000
75.	7307.414	1.170	3630.783	-12.940	0.000	3732.554	-9.400	0.000
76.	7310.045	1.190	3616.769	-12.020	0.000	3721.706	-9.400	0.000
77.	7312.696	1.190	3603.944	-10.970	0.000	3711.054	-9.390	0.000
78.	7315.332	1.170	3592.429	-9.790	0.000	3700.371	-9.370	0.000
79.	7317.907	1.140	3582.336	-8.500	0.000	3689.752	-9.330	0.000
80.	7320.385	1.080	3573.769	-7.110	0.000	3679.209	-9.290	0.000
81.	7322.732	1.020	3566.802	-5.630	0.000	3668.756	-9.230	0.000
82.	7324.916	0.940	3561.504	-4.090	0.000	3658.407	-9.160	0.000
83.	7326.907	0.850	3557.922	-2.500	0.000	3648.175	-9.070	0.000
84.	7328.682	0.740	3556.084	-0.890	0.000	3638.074	-8.980	0.000
85.	7330.217	0.630	3556.002	0.730	0.000	3628.117	-8.870	0.000
86.	7331.496	0.510	3557.666	2.330	0.000	3618.310	-8.750	0.000
87.	7332.503	0.390	3561.048	3.690	0.000	3608.690	-8.610	0.000
88.	7333.229	0.260	3566.103	5.340	0.000	3599.245	-8.460	0.000
89.	7333.667	0.130	3572.767	6.810	0.000	3589.996	-8.300	0.000
90.	7333.813	-0.000	3580.960	8.130	0.000	3580.760	-8.130	0.000
91.	7333.668	-0.130	3590.590	9.350	0.000	3572.145	-7.940	0.000
92.	7333.234	-0.260	3601.549	10.440	0.000	3563.265	-7.740	0.000
93.	7332.519	-0.380	3613.719	11.410	0.000	3554.232	-7.530	0.000
94.	7331.532	-0.500	3626.974	12.260	0.000	3547.157	-7.310	0.000
95.	7330.283	-0.620	3641.176	12.970	0.000	3539.354	-7.070	0.000
96.	7328.787	-0.720	3656.193	13.540	0.000	3531.632	-6.820	0.000
97.	7327.859	-0.820	3671.875	13.990	0.000	3524.604	-6.560	0.000
98.	7326.115	-0.920	3688.082	14.310	0.000	3517.679	-6.290	0.000
99.	7322.973	-1.000	3704.670	14.510	0.000	3511.066	-6.010	0.000

X-PLANE (YZ-PLANE) LITHIUM NIOBATE (SMITH AND WELSH)

	LPM12	LPM13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	-1.060	-0.000	3721.501	14.590	0.000	3304.781	-5.120	0.000
101.	-1.150	-0.000	3738.439	14.566	0.000	3430.827	-5.414	0.000
102.	-1.210	-0.000	3755.355	14.836	0.000	3493.215	-5.100	0.000
103.	-1.270	-0.000	3772.129	14.800	0.000	3487.953	-4.770	0.000
104.	-1.320	-0.000	3788.645	13.056	0.000	3483.051	-4.440	0.000
105.	-1.360	-0.000	3804.813	13.510	0.000	3478.514	-4.100	0.000
106.	-1.400	-0.000	3820.530	13.060	0.000	3474.351	-3.750	0.000
107.	-1.440	-0.000	3835.721	12.550	0.000	3470.567	-3.390	0.000
108.	-1.460	-0.000	3850.321	12.000	0.000	3467.169	-3.030	0.000
109.	-1.510	-0.000	3864.275	11.416	0.000	3464.161	-2.660	0.000
110.	-1.550	-0.000	3877.544	10.800	0.000	3461.549	-2.290	0.000
111.	-1.590	-0.000	3890.100	10.160	0.000	3459.336	-1.910	0.000
112.	-1.640	-0.000	3901.925	9.560	0.000	3457.526	-1.530	0.000
113.	-1.690	-0.000	3913.025	8.940	0.000	3456.122	-1.140	0.000
114.	-1.750	-0.000	3923.412	8.330	0.000	3455.126	-0.750	0.000
115.	-1.810	-0.000	3933.099	7.760	0.000	3454.539	-0.360	0.000
116.	-1.890	-0.000	3942.125	7.210	0.000	3454.363	-0.030	0.000
117.	-1.960	-0.000	3950.532	6.710	0.000	3454.597	.420	0.000
118.	-2.080	-0.000	3958.375	6.260	0.000	3455.242	.810	0.000
119.	-2.190	-0.000	3965.713	5.860	0.000	3456.247	1.200	0.000
120.	-2.310	-0.000	3972.616	5.530	0.000	3457.759	1.580	0.000
121.	-2.450	-0.000	3979.159	5.260	0.000	3459.626	1.960	0.000
122.	-2.600	-0.000	3985.421	5.050	0.000	3461.896	2.340	0.000
123.	-2.770	-0.000	3991.486	4.920	0.000	3464.565	2.710	0.000
124.	-2.950	-0.000	3997.441	4.860	0.000	3467.629	3.080	0.000
125.	-3.140	-0.000	4003.373	4.870	0.000	3471.082	3.440	0.000
126.	-3.340	-0.000	4009.371	4.950	0.000	3474.920	3.800	0.000
127.	-3.550	-0.000	4015.524	5.100	0.000	3479.137	4.150	0.000
128.	-3.780	-0.000	4021.917	5.320	0.000	3483.726	4.490	0.000
129.	-4.010	-0.000	4028.634	5.610	0.000	3488.660	4.820	0.000
130.	-4.250	-0.000	4035.754	5.960	0.000	3494.053	5.140	0.000
131.	-4.490	-0.000	4043.354	6.360	0.000	3499.893	5.460	0.000
132.	-4.740	-0.000	4051.502	6.810	0.000	3505.655	5.760	0.000
133.	-5.000	-0.000	4059.692	7.310	0.000	3511.969	6.050	0.000
134.	-5.250	-0.000	4068.263	7.840	0.000	3518.646	6.330	0.000
135.	-5.510	-0.000	4075.836	8.400	0.000	3525.614	6.600	0.000
136.	-5.760	-0.000	4090.742	8.990	0.000	3532.885	6.860	0.000
137.	-6.010	-0.000	4102.436	9.590	0.000	3540.440	7.110	0.000
138.	-6.250	-0.000	4114.942	10.200	0.000	3548.290	7.340	0.000
139.	-6.460	-0.000	4128.274	10.800	0.000	3556.402	7.560	0.000
140.	-6.700	-0.000	4142.433	11.400	0.000	3564.771	7.770	0.000
141.	-6.910	-0.000	4157.414	11.970	0.000	3573.306	7.970	0.000
142.	-7.100	-0.000	4173.195	12.520	0.000	3582.233	8.160	0.000
143.	-7.280	-0.000	4189.760	13.040	0.000	3591.302	8.330	0.000
144.	-7.430	-0.000	4207.059	13.520	0.000	3600.578	8.490	0.000
145.	-7.560	-0.000	4225.048	13.950	0.000	3610.049	8.630	0.000
146.	-7.660	-0.000	4243.667	14.320	0.000	3619.703	8.760	0.000
147.	-7.730	-0.000	4262.845	14.640	0.000	3629.525	8.880	0.000
148.	-7.770	-0.000	4282.514	14.890	0.000	3639.504	8.990	0.000
149.	-7.770	-0.000	4302.573	15.070	0.000	3649.624	9.090	0.000

X-PLANE (YZ-PLANE) LITHIUM NIOBATE (SMITH AND WELSH)

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
150.	6980.799	-7.740	-0.000	4322.928	15.180	0.000	3655.873	9.170	0.000
151.	6884.526	-7.660	-0.000	4343.472	15.200	0.000	3670.230	9.240	0.000
152.	6866.502	-7.540	-0.000	4364.091	15.140	0.000	3689.704	9.290	0.000
153.	6852.826	-7.370	-0.000	4384.659	15.000	0.000	3691.259	9.340	0.000
154.	6837.600	-7.150	-0.000	4405.049	14.760	0.000	3701.666	9.370	0.000
155.	6822.931	-6.870	-0.000	4425.122	14.430	0.000	3712.579	9.390	0.000
156.	6808.829	-6.540	-0.000	4444.736	14.000	0.000	3723.310	9.400	0.000
157.	6795.705	-6.150	-0.000	4463.751	13.470	0.000	3734.069	9.400	0.000
158.	6783.387	-5.710	-0.000	4482.013	12.850	0.000	3744.681	9.380	0.000
159.	6772.077	-5.200	-0.000	4499.377	12.120	0.000	3755.002	9.360	0.000
160.	6761.896	-4.640	-0.000	4515.696	11.300	0.000	3766.477	9.320	0.000
161.	6752.934	-4.020	-0.000	4530.826	10.360	0.000	3777.253	9.270	0.000
162.	6745.360	-3.350	-0.000	4544.629	9.380	0.000	3787.938	9.210	0.000
163.	6739.211	-2.630	-0.000	4556.976	8.260	0.000	3798.690	9.150	0.000
164.	6734.596	-1.860	-0.000	4567.752	7.110	0.000	3809.341	9.070	0.000
165.	6731.595	-1.060	-0.000	4576.846	5.860	0.000	3819.915	8.960	0.000
166.	6730.279	-0.230	-0.000	4584.171	4.560	0.000	3830.407	8.820	0.000
167.	6730.665	.620	-0.000	4589.655	3.260	0.000	3841.606	8.700	0.000
168.	6732.849	1.490	-0.000	4593.244	1.860	0.000	3851.099	8.600	0.000
169.	6736.783	2.350	-0.000	4594.905	.490	0.000	3861.274	8.530	0.000
170.	6742.480	3.200	-0.000	4594.627	-.890	0.000	3871.321	8.460	0.000
171.	6749.917	4.030	-0.000	4592.418	-2.260	0.000	3881.229	8.260	0.000
172.	6759.049	4.820	-0.000	4588.310	-3.600	0.000	3890.995	8.110	0.000
173.	6769.816	5.590	-0.000	4582.350	-4.910	0.000	3900.580	7.950	0.000
174.	6782.140	6.300	-0.000	4574.607	-6.150	0.000	3910.003	7.750	0.000
175.	6795.934	6.970	-0.000	4565.163	-7.340	0.000	3919.244	7.620	0.000
176.	6811.093	7.570	-0.000	4554.115	-8.450	0.000	3928.292	7.440	0.000
177.	6827.508	8.120	-0.000	4541.572	-9.490	0.000	3937.139	7.250	0.000
178.	6845.060	8.610	-0.000	4527.651	-10.490	0.000	3945.775	7.060	0.000
179.	6863.625	9.030	-0.000	4512.470	-11.310	0.000	3954.190	6.860	0.000
180.	6883.078	9.380	-0.000	4496.182	-12.090	0.000	3962.377	6.660	0.000

Y-PLANE (XZ-PLANE) LITHIUM NIOBATE (SMITH AND WELSH)

BULK

	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
0.	6614.376	0.000	0.000	4802.876	0.000	0.000	4050.767	0.000	0.000
1.	6615.293	.910	.660	4801.855	-1.400	-1.770	4050.759	-1.340	.300
2.	6616.025	1.800	1.320	4798.746	-2.780	-1.540	4058.136	-1.670	.590
3.	6622.544	2.670	1.966	4793.735	-4.130	-2.290	4057.099	-1.610	.890
4.	6628.797	3.510	2.560	4786.727	-5.440	-3.010	4055.853	-1.340	1.160
5.	6636.716	4.310	3.170	4777.845	-6.700	-3.700	4053.880	-1.660	1.440
6.	6646.215	5.050	3.740	4767.181	-7.860	-4.350	4051.227	-1.500	1.760
7.	6657.194	5.740	4.260	4754.838	-9.000	-4.920	4048.931	-2.300	2.040
8.	6669.545	6.370	4.760	4740.933	-10.040	-5.510	4045.870	-2.610	2.320
9.	6683.150	6.940	5.210	4725.592	-10.990	-6.010	4042.164	-2.510	2.600
10.	6697.887	7.440	5.620	4708.945	-11.860	-6.460	4036.895	-3.200	2.860
11.	6713.629	7.870	5.990	4691.125	-12.640	-6.850	4034.276	-3.490	3.140
12.	6730.251	8.240	6.320	4672.267	-13.340	-7.190	4030.120	-3.760	3.430
13.	6747.626	8.550	6.620	4652.505	-13.950	-7.470	4025.345	-4.010	3.680
14.	6765.636	8.800	6.870	4631.968	-14.480	-7.690	4020.267	-4.260	3.910
15.	6784.161	8.990	7.090	4610.784	-14.940	-7.860	4014.906	-4.480	4.160
16.	6803.084	9.130	7.270	4589.873	-15.320	-7.970	4009.283	-4.690	4.400
17.	6822.296	9.220	7.420	4566.946	-15.630	-8.040	4003.421	-4.890	4.640
18.	6841.700	9.260	7.530	4544.516	-15.870	-8.070	3997.344	-5.060	4.880
19.	6861.195	9.250	7.620	4521.884	-16.050	-8.010	3991.076	-5.210	5.110
20.	6880.691	9.210	7.680	4499.138	-16.170	-7.930	3984.646	-5.340	5.340
21.	6900.104	9.130	7.710	4476.365	-16.240	-7.810	3976.079	-5.450	5.570
22.	6919.357	9.010	7.720	4453.644	-16.260	-7.640	3971.405	-5.540	5.800
23.	6938.378	8.860	7.710	4431.046	-16.230	-7.450	3964.500	-5.600	6.030
24.	6957.100	8.690	7.680	4408.635	-16.160	-7.220	3957.444	-5.640	6.270
25.	6975.466	8.490	7.620	4386.469	-16.050	-6.960	3951.012	-5.660	6.510
26.	6993.419	8.270	7.550	4364.600	-15.900	-6.670	3944.182	-5.660	6.750
27.	7010.912	8.020	7.460	4343.075	-15.720	-6.370	3937.375	-5.640	7.010
28.	7027.901	7.760	7.360	4321.935	-15.510	-6.050	3930.613	-5.610	7.280
29.	7044.349	7.490	7.240	4301.221	-15.270	-5.720	3923.912	-5.560	7.560
30.	7060.222	7.200	7.110	4280.966	-14.990	-5.350	3917.284	-5.500	7.860
31.	7075.451	6.910	6.970	4261.209	-14.690	-5.050	3910.737	-5.450	8.110
32.	7090.134	6.600	6.810	4241.977	-14.360	-4.710	3904.271	-5.390	8.370
33.	7104.131	6.250	6.650	4223.304	-14.000	-4.380	3897.879	-5.340	8.660
34.	7117.468	5.960	6.470	4205.422	-13.610	-4.070	3891.549	-5.300	8.930
35.	7130.134	5.660	6.290	4187.764	-13.190	-3.770	3885.256	-5.250	9.230
36.	7142.123	5.340	6.100	4170.964	-12.740	-3.450	3878.977	-5.310	9.480
37.	7153.434	5.020	5.900	4154.857	-12.250	-3.230	3872.668	-5.360	9.740
38.	7164.068	4.710	5.690	4139.479	-11.730	-2.990	3866.286	-5.450	10.040
39.	7174.031	4.400	5.480	4124.864	-11.170	-2.770	3859.779	-5.500	11.410
40.	7183.333	4.090	5.270	4111.045	-10.590	-2.560	3853.094	-5.770	11.690
41.	7191.986	3.800	5.050	4098.050	-9.970	-2.420	3846.173	-6.000	12.380
42.	7200.008	3.510	4.830	4085.901	-9.330	-2.270	3838.362	-6.260	12.670
43.	7207.417	3.240	4.600	4074.606	-8.690	-2.130	3831.413	-6.600	13.320
44.	7215.237	2.970	4.370	4064.167	-8.040	-2.010	3823.464	-6.940	13.620
45.	7220.494	2.720	4.150	4054.559	-7.410	-1.900	3815.120	-7.310	14.270
46.	7226.216	2.460	3.920	4045.747	-6.810	-1.790	3806.395	-7.690	14.760
47.	7231.435	2.260	3.690	4037.675	-6.260	-1.690	3797.422	-8.050	15.100
48.	7236.103	2.050	3.470	4030.271	-5.760	-1.600	3787.649	-8.400	15.460
49.	7240.495	1.860	3.240	4023.448	-5.340	-1.510	3777.704	-8.720	15.800

Y-PLANE (XZ-PLANE) LITHIUM NIOBATE (SMITH AND WELSH)

BULK

	LMGVEL	LPHI12	LPHI13	FSRWEL	FSPW12	FSPW13	SSRWEL	SSPH12	SSPH13
50.	7244.489	1.690	3.020	4017.106	-5.000	-1.440	3767.428	-9.010	16.110
51.	7247.961	1.530	2.810	4011.141	-4.750	-1.370	3756.070	-9.250	16.300
52.	7251.192	1.400	2.590	4005.441	-4.560	-1.330	3746.083	-9.450	16.620
53.	7254.140	1.260	2.390	3999.895	-4.510	-1.300	3735.121	-9.600	16.840
54.	7256.845	1.170	2.190	3994.594	-4.600	-1.330	3724.043	-9.710	17.020
55.	7259.346	1.090	1.990	3988.834	-4.620	-1.310	3712.902	-9.770	17.100
56.	7261.681	1.020	1.810	3983.115	-4.750	-1.360	3701.751	-9.700	17.310
57.	7263.886	.970	1.630	3977.145	-4.750	-1.430	3690.643	-9.750	17.410
58.	7265.999	.940	1.460	3970.842	-5.300	-1.540	3679.624	-9.600	17.440
59.	7268.051	.920	1.300	3964.132	-5.730	-1.670	3668.740	-9.510	17.530
60.	7270.074	.910	1.150	3956.949	-6.150	-1.830	3658.035	-9.430	17.540
61.	7272.055	.920	1.010	3949.241	-6.610	-2.010	3647.550	-9.250	17.520
62.	7274.139	.930	.880	3940.962	-7.110	-2.220	3637.323	-9.030	17.410
63.	7276.228	.950	.760	3932.079	-7.630	-2.450	3627.391	-8.770	17.380
64.	7278.370	.990	.650	3922.570	-8.170	-2.700	3617.769	-8.490	17.200
65.	7280.603	1.020	.550	3912.423	-8.720	-2.960	3608.353	-8.170	17.100
66.	7282.913	1.060	.460	3901.637	-9.260	-3.240	3599.716	-7.820	16.950
67.	7285.313	1.100	.380	3890.220	-9.800	-3.520	3591.310	-7.440	16.820
68.	7287.803	1.140	.300	3878.193	-10.320	-3.800	3583.366	-7.020	16.600
69.	7290.382	1.160	.240	3865.544	-10.610	-4.080	3575.916	-6.570	16.030
70.	7293.042	1.210	.190	3852.433	-11.260	-4.350	3568.991	-6.100	15.600
71.	7295.773	1.240	.140	3838.766	-11.700	-4.610	3562.020	-5.550	15.220
72.	7298.562	1.260	.100	3824.698	-12.080	-4.840	3556.834	-5.050	14.740
73.	7301.392	1.260	.070	3810.233	-12.410	-5.050	3551.662	-4.460	14.210
74.	7304.243	1.260	.040	3795.456	-12.680	-5.230	3547.132	-3.860	13.630
75.	7307.095	1.240	.020	3780.446	-12.800	-5.360	3543.274	-3.250	13.010
76.	7309.924	1.260	.010	3765.281	-13.040	-5.450	3540.114	-2.600	12.330
77.	7312.706	1.230	-0.000	3750.038	-13.120	-5.490	3537.679	-1.910	11.610
78.	7315.415	1.200	-0.010	3734.803	-13.130	-5.460	3535.996	-1.210	10.840
79.	7318.026	1.158	-0.020	3719.659	-13.070	-5.400	3535.068	-0.460	10.030
80.	7320.512	1.080	-0.020	3704.691	-12.940	-5.260	3534.979	.280	9.100
81.	7322.850	1.010	-0.020	3689.980	-12.730	-5.050	3535.690	1.050	8.300
82.	7325.014	.930	-0.020	3675.604	-12.460	-4.760	3537.234	1.630	7.390
83.	7326.982	.830	-0.010	3661.651	-12.120	-4.410	3539.642	2.630	6.440
84.	7328.734	.730	-0.010	3648.181	-11.710	-3.960	3542.913	3.430	5.510
85.	7330.250	.620	-0.010	3635.266	-11.250	-3.480	3547.061	4.240	4.560
86.	7331.514	.510	-0.010	3622.967	-10.720	-2.910	3552.091	5.040	3.610
87.	7332.511	.390	-0.000	3611.342	-10.140	-2.270	3558.003	5.640	2.670
88.	7333.232	.260	-0.000	3600.436	-9.510	-1.570	3564.793	6.620	1.700
89.	7333.667	.130	-0.000	3590.299	-8.840	-0.810	3572.451	7.390	.860
90.	7333.813	-0.000	-0.000	3580.960	-8.130	0.000	3580.960	8.130	0.000
91.	7333.667	-1.130	-0.000	3572.451	-7.390	.660	3590.299	8.640	-0.010
92.	7333.232	-2.260	-0.000	3564.793	-6.620	1.750	3600.438	9.510	-1.510
93.	7332.511	-3.390	-0.000	3558.003	-5.840	2.670	3611.342	10.140	-2.270
94.	7331.514	-4.510	-0.010	3552.091	-5.040	3.610	3622.967	10.720	-2.910
95.	7330.250	-5.620	-0.010	3547.061	-4.240	4.560	3635.266	11.250	-3.480
96.	7328.734	-6.730	-0.010	3542.913	-3.430	5.510	3648.181	11.710	-4.240
97.	7326.982	-7.830	-0.010	3539.642	-2.630	6.460	3661.651	12.120	-5.040
98.	7325.014	-8.930	-0.020	3537.235	-1.830	7.390	3675.608	12.460	-5.760
99.	7322.850	-1.010	-0.020	3535.690	-1.050	8.300	3689.980	12.730	-5.010

Y-PLANE (XZ-PLANE) LITHIUM NIOBATE (SMITH AND WELSH)

BULK

	LNQVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	7320.512	-1.060	-0.020	3534.979	-0.260	9.160	3704.691	12.540	-2.260
101.	7316.026	-1.150	-0.020	3535.086	-0.660	10.030	3714.659	13.670	-2.400
102.	7315.415	-1.200	-0.010	3535.996	1.210	10.840	3734.603	13.130	-2.400
103.	7312.706	-1.230	-0.010	3537.679	1.910	11.610	3750.558	13.120	-2.450
104.	7309.924	-1.260	0.010	3540.114	2.600	12.330	3765.281	13.040	-2.450
105.	7307.095	-1.260	0.020	3543.274	3.250	13.010	3780.448	12.690	-2.360
106.	7304.243	-1.280	0.040	3547.132	3.860	13.630	3795.458	12.600	-2.230
107.	7301.392	-1.260	0.070	3551.662	4.480	14.210	3810.233	12.410	-2.160
108.	7298.562	-1.260	0.100	3556.834	5.050	14.740	3824.698	12.060	-2.040
109.	7295.773	-1.240	0.140	3562.620	5.590	15.220	3838.766	11.700	-1.930
110.	7293.042	-1.210	0.190	3568.991	6.100	15.650	3852.433	11.260	-1.830
111.	7290.382	-1.180	0.240	3575.916	6.570	16.030	3865.594	10.810	-1.740
112.	7287.803	-1.140	0.300	3583.366	7.020	16.360	3878.193	10.320	-1.660
113.	7285.313	-1.100	0.360	3591.310	7.440	16.650	3890.220	9.800	-1.580
114.	7282.913	-1.060	0.460	3599.716	7.820	16.900	3901.637	9.260	-1.500
115.	7280.603	-1.020	0.550	3608.553	8.170	17.100	3912.423	8.720	-1.420
116.	7278.378	-0.990	0.650	3617.789	8.490	17.260	3922.570	8.170	-1.340
117.	7276.228	-0.950	0.760	3627.391	8.770	17.380	3932.079	7.630	-1.260
118.	7274.139	-0.930	0.880	3637.323	9.030	17.470	3940.962	7.110	-1.180
119.	7272.095	-0.920	1.010	3647.550	9.250	17.520	3949.241	6.610	-1.100
120.	7270.074	-0.910	1.150	3658.035	9.430	17.540	3956.949	6.150	-1.030
121.	7268.051	-0.900	1.300	3668.740	9.570	17.530	3964.132	5.730	-0.960
122.	7265.995	-0.890	1.460	3678.624	9.680	17.460	3970.842	5.350	-0.890
123.	7263.886	-0.870	1.630	3690.643	9.750	17.410	3977.145	5.000	-0.830
124.	7261.681	-1.020	1.810	3701.751	9.780	17.310	3983.115	4.790	-0.780
125.	7259.346	-1.090	1.990	3712.902	9.770	17.160	3988.834	4.620	-0.730
126.	7256.845	-1.170	2.190	3724.043	9.710	17.020	3994.394	4.500	-0.680
127.	7254.140	-1.260	2.390	3735.121	9.600	16.840	3999.895	4.450	-0.630
128.	7251.192	-1.400	2.590	3746.083	9.450	16.620	4005.441	4.450	-0.580
129.	7247.961	-1.530	2.810	3756.870	9.250	16.360	4011.141	4.750	-0.530
130.	7244.409	-1.650	3.020	3767.426	9.010	16.110	4017.106	5.000	-0.480
131.	7240.495	-1.860	3.240	3777.704	8.720	15.850	4023.448	5.340	-0.430
132.	7236.183	-2.050	3.470	3787.689	8.400	15.460	4030.271	5.760	-0.380
133.	7231.435	-2.260	3.690	3797.222	8.050	15.100	4037.575	6.260	-0.330
134.	7226.216	-2.480	3.920	3806.395	7.690	14.700	4045.747	6.810	-0.280
135.	7220.494	-2.720	4.150	3815.150	7.310	14.270	4054.599	7.410	-0.230
136.	7214.237	-2.970	4.370	3823.484	6.940	13.820	4064.167	8.040	-0.180
137.	7207.417	-3.240	4.600	3831.413	6.600	13.350	4074.608	8.690	-0.130
138.	7200.808	-3.510	4.830	3838.962	6.280	12.870	4085.981	9.330	-0.080
139.	7193.966	-3.800	5.050	3846.173	6.000	12.360	4098.050	9.970	-0.030
140.	7186.333	-4.090	5.270	3853.094	5.770	11.890	4111.045	10.590	0.020
141.	7174.031	-4.400	5.480	3859.779	5.560	11.410	4124.864	11.170	0.070
142.	7164.060	-4.710	5.690	3866.286	5.360	10.940	4139.479	11.730	0.120
143.	7153.434	-5.020	5.900	3872.666	5.160	10.460	4154.857	12.250	0.170
144.	7142.123	-5.340	6.100	3878.977	5.310	10.040	4170.964	12.740	0.220
145.	7130.134	-5.660	6.290	3885.256	5.250	9.630	4187.704	13.190	0.270
146.	7117.466	-5.980	6.470	3891.549	5.300	9.230	4205.222	13.610	0.320
147.	7104.131	-6.290	6.658	3897.879	5.340	8.860	4223.304	14.000	0.370
148.	7090.134	-6.600	6.810	3904.271	5.390	8.510	4241.977	14.360	0.420
149.	7075.491	-6.910	6.970	3910.737	5.450	8.170	4261.209	14.690	0.470

Y-PLANE (XZ-PLANE) LITHIUM NIOBATE (SMITH AND WELSH)

BULK

	LMGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
150.	7060.222	-7.200	7.110	3917.204	5.500	7.660	4200.968	14.990	-5.390
151.	7046.349	-7.490	7.240	3923.912	5.560	7.560	4301.221	15.270	-5.720
152.	7027.901	-7.760	7.360	3930.613	5.610	7.260	4321.435	15.510	-6.050
153.	7010.912	-8.020	7.460	3937.375	5.640	7.010	4343.075	15.720	-6.370
154.	6993.419	-8.270	7.550	3944.162	5.660	6.750	4364.600	15.900	-6.690
155.	6975.466	-8.490	7.620	3951.012	5.660	6.510	4386.469	16.050	-6.990
156.	6957.100	-8.690	7.680	3957.844	5.640	6.270	4408.635	16.160	-7.220
157.	6938.378	-8.860	7.710	3964.650	5.600	6.030	4431.046	16.230	-7.440
158.	6919.357	-9.010	7.720	3971.485	5.540	5.800	4453.644	16.260	-7.640
159.	6900.104	-9.130	7.710	3978.079	5.450	5.570	4476.165	16.240	-7.810
160.	6880.691	-9.210	7.680	3984.646	5.340	5.340	4499.136	16.170	-7.930
161.	6861.195	-9.250	7.620	3991.076	5.210	5.110	4521.664	16.050	-8.010
162.	6841.700	-9.260	7.530	3997.341	5.060	4.860	4544.518	15.870	-8.050
163.	6822.256	-9.220	7.420	4003.421	4.890	4.640	4566.948	15.630	-8.040
164.	6803.084	-9.130	7.270	4009.283	4.690	4.400	4589.073	15.320	-7.970
165.	6784.161	-8.990	7.090	4014.906	4.460	4.160	4610.784	14.940	-7.860
166.	6765.636	-8.800	6.870	4020.267	4.200	3.910	4631.366	14.460	-7.690
167.	6747.628	-8.590	6.620	4025.345	4.010	3.660	4652.505	13.950	-7.470
168.	6730.251	-8.240	6.320	4030.120	3.760	3.400	4672.267	13.340	-7.150
169.	6713.629	-7.870	5.990	4034.576	3.450	3.140	4691.125	12.640	-6.820
170.	6697.887	-7.400	5.620	4038.695	3.200	2.870	4708.445	11.860	-6.400
171.	6683.150	-6.940	5.210	4042.664	2.910	2.500	4725.542	10.990	-6.010
172.	6669.545	-6.370	4.760	4045.870	2.610	2.320	4740.933	10.040	-5.510
173.	6657.194	-5.740	4.260	4048.901	2.300	2.040	4754.836	9.000	-4.950
174.	6646.215	-5.050	3.740	4051.547	1.960	1.760	4767.181	7.880	-4.350
175.	6636.716	-4.310	3.170	4053.900	1.660	1.470	4777.942	6.700	-3.730
176.	6628.797	-3.510	2.500	4055.653	1.340	1.180	4786.727	5.440	-3.010
177.	6622.544	-2.670	1.960	4057.099	1.010	.890	4793.735	4.130	-2.290
178.	6618.025	-1.800	1.320	4058.136	.670	.590	4798.796	2.760	-1.540
179.	6615.293	-0.910	.660	4058.759	.340	.300	4801.855	1.400	-0.770
180.	6614.378	-0.000	0.000	4058.967	-0.000	-0.000	4802.878	-0.000	0.000

Z-PLANE (XY-PLANE) LITHIUM NIOBATE (SMITH AND WELSH)

BULK

	LMGWEL	LPN112	LPN113	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	6614.378	0.000	0.000	4802.878	0.000	0.000	4058.967	0.000	0.000
1.	6615.256	0.870	-0.660	4801.810	-1.460	1.770	4058.799	-0.270	-0.350
2.	6617.875	1.720	-1.320	4790.628	-2.690	1.540	4058.594	-0.590	-0.750
3.	6622.187	2.540	-1.960	4793.390	-4.260	2.300	4057.450	-0.820	-1.090
4.	6628.115	3.320	-2.590	4786.193	-5.560	3.040	4056.266	-1.100	-1.410
5.	6635.556	4.030	-3.190	4777.168	-6.760	3.770	4054.739	-1.380	-1.740
6.	6644.384	4.670	-3.770	4766.475	-7.850	4.460	4052.866	-1.660	-2.070
7.	6654.455	5.230	-4.310	4754.296	-8.800	5.140	4051.844	-1.940	-2.400
8.	6665.612	5.720	-4.830	4740.842	-9.620	5.780	4048.873	-2.230	-2.740
9.	6677.685	6.110	-5.310	4726.322	-10.290	6.390	4045.151	-2.510	-3.020
10.	6690.504	6.420	-5.760	4710.966	-10.810	6.970	4041.681	-2.790	-3.320
11.	6703.893	6.640	-6.180	4695.003	-11.160	7.520	4038.269	-3.070	-3.630
12.	6717.680	6.780	-6.570	4678.658	-11.400	8.040	4034.325	-3.340	-3.920
13.	6731.696	6.830	-6.920	4662.154	-11.470	8.520	4030.067	-3.590	-4.220
14.	6745.778	6.810	-7.240	4645.702	-11.410	8.960	4025.516	-3.820	-4.530
15.	6759.772	6.720	-7.530	4629.499	-11.210	9.400	4020.705	-4.020	-4.850
16.	6773.530	6.560	-7.800	4613.729	-10.890	9.780	4015.674	-4.190	-5.170
17.	6786.917	6.340	-8.040	4598.556	-10.470	10.140	4010.473	-4.320	-5.490
18.	6799.805	6.060	-8.260	4584.122	-9.940	10.460	4005.162	-4.370	-5.820
19.	6812.076	5.730	-8.450	4570.553	-9.330	10.750	3999.811	-4.360	-6.150
20.	6823.629	5.350	-8.620	4557.952	-8.640	11.000	3994.499	-4.320	-6.480
21.	6834.362	4.930	-8.780	4546.401	-7.890	11.230	3989.309	-4.190	-6.800
22.	6844.190	4.480	-8.910	4535.967	-7.100	11.420	3984.333	-4.100	-7.130
23.	6853.039	3.990	-9.020	4526.696	-6.270	11.590	3979.664	-3.980	-7.450
24.	6860.839	3.470	-9.120	4518.627	-5.410	11.730	3975.392	-3.830	-7.770
25.	6867.536	2.930	-9.200	4511.779	-4.520	11.850	3971.605	-3.650	-8.090
26.	6873.079	2.360	-9.270	4506.166	-3.630	11.940	3968.385	-3.420	-8.420
27.	6877.431	1.750	-9.320	4501.800	-2.730	12.010	3965.802	-3.160	-8.750
28.	6880.561	1.200	-9.360	4498.679	-1.820	12.060	3963.914	-2.890	-9.080
29.	6882.446	0.600	-9.380	4496.807	-0.910	12.090	3962.777	-2.640	-9.400
30.	6883.078	0.000	-9.380	4496.182	0.000	12.100	3962.393	-2.400	-9.720
31.	6882.446	-0.600	-9.360	4498.679	0.910	12.090	3963.914	-2.160	-10.050
32.	6880.561	-1.200	-9.320	4501.800	1.820	12.010	3965.802	-1.890	-10.380
33.	6877.431	-1.750	-9.270	4506.166	2.730	11.940	3968.385	-1.660	-10.700
34.	6873.079	-2.360	-9.200	4511.779	3.630	11.850	3971.605	-1.420	-11.030
35.	6867.536	-2.930	-9.120	4518.627	4.520	11.730	3975.392	-1.200	-11.350
36.	6860.839	-3.470	-9.020	4526.696	5.410	11.590	3979.664	-1.000	-11.670
37.	6853.039	-3.990	-8.910	4535.967	6.270	11.420	3984.333	-0.820	-12.000
38.	6844.190	-4.480	-8.910	4546.401	7.100	11.230	3989.309	-0.600	-12.320
39.	6834.362	-4.930	-8.780	4557.952	7.890	11.000	3994.499	-0.500	-12.650
40.	6823.629	-5.350	-8.620	4570.553	8.640	10.750	3999.811	-0.350	-12.970
41.	6812.076	-5.730	-8.450	4584.122	9.330	10.460	4005.162	-0.270	-13.300
42.	6799.805	-6.060	-8.260	4598.556	9.940	10.140	4010.473	-0.230	-13.620
43.	6786.917	-6.340	-8.040	4613.729	10.470	9.780	4015.674	-0.200	-13.950
44.	6773.530	-6.560	-7.800	4629.499	10.890	9.400	4020.705	-0.180	-14.270
45.	6759.772	-6.720	-7.530	4645.702	11.210	8.960	4025.516	-0.160	-14.600
46.	6745.778	-6.810	-7.240	4662.154	11.410	8.520	4030.067	-0.150	-14.920
47.	6731.696	-6.830	-6.920	4678.658	11.470	8.040	4034.325	-0.140	-15.250
48.	6717.680	-6.780	-6.570	4695.003	11.160	7.520	4038.269	-0.130	-15.570
49.	6703.893	-6.640	-6.180	4710.966	10.810	6.970	4041.681	-0.120	-15.900

Z-PLANE (XY-PLANE) LITHIUM NIOBATE (SMITH AND WELSH)

	LPM12	LPM13	FSRVEL	FSPH12	FSPH13	BULK	SSPH12	SSPH13
50.	6690.504	-5.760	4710.966	10.810	6.970	4041.081	2.790	-3.020
51.	6677.685	-5.310	4726.322	10.290	6.350	4045.151	2.510	-2.710
52.	6665.612	-4.830	4740.842	9.620	5.760	4048.073	2.230	-2.400
53.	6654.455	-4.310	4754.298	8.800	5.140	4050.644	1.940	-2.100
54.	6644.384	-3.770	4766.475	7.850	4.460	4052.866	1.660	-1.790
55.	6635.356	-3.190	4777.168	6.760	3.770	4054.739	1.380	-1.490
56.	6628.115	-2.590	4786.193	5.560	3.040	4056.266	1.100	-1.190
57.	6622.187	-1.960	4793.390	4.260	2.300	4057.450	.820	-.890
58.	6617.875	-1.320	4798.628	2.890	1.540	4058.294	.540	-.590
59.	6615.256	-.660	4801.810	1.460	.770	4058.749	.270	-.300
60.	6614.378	0.000	4802.878	0.000	0.000	4058.967	0.000	0.000
61.	6615.256	.660	4801.810	-1.460	-.770	4058.749	-.270	-.300
62.	6617.875	1.320	4798.628	-2.890	-1.540	4058.294	-.540	-.590
63.	6622.187	2.540	4793.390	-4.260	-2.300	4057.450	-.820	-.890
64.	6628.115	3.770	4786.193	-5.560	-3.040	4056.266	-1.100	-1.190
65.	6635.356	4.990	4777.168	-6.760	-3.770	4054.739	-1.380	-1.490
66.	6644.384	6.200	4766.475	-7.850	-4.460	4052.866	-1.660	-1.790
67.	6654.455	7.420	4754.298	-8.800	-5.140	4050.644	-1.940	-2.100
68.	6665.612	8.630	4740.842	-9.620	-5.760	4048.073	-2.230	-2.400
69.	6677.685	9.840	4726.322	-10.290	-6.350	4045.151	-2.510	-2.710
70.	6690.504	11.050	4710.966	-10.810	-6.970	4041.081	-2.790	-3.020
71.	6703.893	12.260	4695.003	-11.400	-7.520	4036.269	-3.070	-3.320
72.	6717.680	13.470	4678.858	-11.940	-8.040	4030.329	-3.340	-3.630
73.	6731.696	14.680	4662.154	-12.430	-8.520	4023.067	-3.590	-3.920
74.	6745.778	15.890	4645.702	-12.870	-8.960	4025.516	-3.820	-4.220
75.	6759.772	17.100	4629.499	-13.260	-9.400	4020.705	-4.020	-4.500
76.	6773.530	18.310	4613.724	-13.600	-9.740	4015.674	-4.180	-4.710
77.	6786.917	19.520	4598.556	-13.890	-10.140	4010.473	-4.300	-4.930
78.	6799.805	20.730	4584.122	-14.140	-10.460	4005.162	-4.370	-5.270
79.	6812.078	21.940	4570.553	-14.350	-10.750	3999.611	-4.380	-5.500
80.	6823.629	23.150	4557.952	-14.520	-11.000	3994.499	-4.320	-5.710
81.	6834.362	24.360	4546.401	-14.640	-11.230	3989.309	-4.190	-5.890
82.	6844.190	25.570	4535.967	-14.710	-11.420	3984.333	-3.980	-6.060
83.	6853.039	26.780	4526.698	-14.740	-11.590	3979.664	-3.700	-6.200
84.	6860.839	27.990	4518.627	-14.730	-11.730	3975.392	-3.340	-6.320
85.	6867.536	29.200	4511.779	-14.680	-11.850	3971.605	2.920	6.440
86.	6873.079	30.410	4506.166	-14.590	-11.940	3968.385	2.420	6.520
87.	6877.431	31.620	4501.800	-14.460	-12.010	3965.002	1.860	6.560
88.	6880.561	32.830	4498.679	-14.300	-12.050	3962.763	1.260	6.560
89.	6882.448	34.040	4496.807	-14.110	-12.060	3962.377	.640	6.560
90.	6883.078	35.250	4496.182	-13.890	-12.050	3962.763	0.000	6.560
91.	6882.448	36.460	4496.807	-13.640	-12.010	3963.914	1.260	6.560
92.	6880.561	37.670	4498.679	-13.350	-12.010	3965.002	1.860	6.560
93.	6877.431	38.880	4501.800	-13.020	-11.940	3966.385	2.420	6.520
94.	6873.079	40.090	4506.166	-12.660	-11.850	3968.385	2.920	6.440
95.	6867.536	41.300	4511.779	-12.270	-11.730	3971.605	3.340	6.320
96.	6860.839	42.510	4518.627	-11.850	-11.590	3975.392	3.700	6.200
97.	6853.039	43.720	4526.698	-11.400	-11.420	3979.664	3.980	6.060
98.	6844.190	44.930	4535.967	-10.920	-11.230	3984.333	4.180	5.890
99.	6834.362	46.140	4546.401	-10.390	-11.000	3989.309	4.320	5.710

Z-PLANE (XY-PLANE) LITHIUM NIOBATE (SMITH AND WELSH)

BULK

	LPH112	LPH113	FSRVEL	FSPH112	FSPH113	SSRVEL	SSPH112	SSPH113
100.	6823.629	-5.350	4557.952	8.640	-11.000	3994.449	4.320	5.700
101.	6812.076	-5.730	4570.553	9.330	-10.750	3959.011	4.360	5.500
102.	6799.805	-6.060	4584.122	9.940	-10.460	4005.162	4.370	5.000
103.	6786.917	-6.340	4598.556	10.470	-10.140	4010.473	4.300	5.030
104.	6773.530	-6.560	4613.729	10.890	-9.760	4015.674	4.160	4.770
105.	6759.772	-6.720	4629.459	11.210	-9.400	4020.705	4.020	4.500
106.	6745.778	-6.810	4645.702	11.410	-9.060	4025.116	3.820	4.220
107.	6731.696	-6.830	4662.154	11.470	-8.520	4030.067	3.520	3.920
108.	6717.680	-6.700	4678.658	11.400	-8.040	4034.325	3.340	3.630
109.	6703.893	-6.640	4695.003	11.160	-7.520	4038.269	3.070	3.320
110.	6690.504	-6.420	4710.966	10.810	-6.970	4041.681	2.790	3.020
111.	6677.605	-6.110	4726.332	10.290	-6.390	4045.151	2.510	2.710
112.	6665.612	-5.720	4740.842	9.620	-5.780	4048.073	2.230	2.400
113.	6654.455	-5.230	4754.256	8.800	-5.140	4050.644	1.940	2.100
114.	6644.384	-4.670	4766.475	7.850	-4.460	4052.666	1.660	1.700
115.	6635.556	-4.030	4777.166	6.760	-3.770	4054.735	1.360	1.400
116.	6628.115	-3.320	4786.193	5.560	-3.040	4056.266	1.100	1.190
117.	6622.107	-2.540	4793.390	4.260	-2.310	4057.450	.820	.890
118.	6617.875	-1.720	4798.626	2.890	-1.540	4058.294	.550	.500
119.	6615.256	-.670	4801.810	1.460	-.770	4058.799	.270	.300
120.	6614.378	0.000	4802.876	-0.000	0.000	4058.907	.000	.000
121.	6615.256	.870	4801.810	-1.460	.770	4058.799	-.270	-.300
122.	6617.875	1.720	4798.626	-2.890	1.540	4058.294	-.550	-.500
123.	6622.107	2.540	4793.390	-4.260	2.310	4057.450	-.820	-.890
124.	6628.115	3.320	4786.193	-5.560	3.040	4056.266	-1.100	-1.190
125.	6635.556	4.030	4777.166	-6.760	3.770	4054.735	-1.360	-1.400
126.	6644.384	4.670	4766.475	-7.850	4.460	4052.666	-1.660	-1.700
127.	6654.455	5.230	4754.256	-8.800	5.140	4050.644	-1.940	-2.100
128.	6665.612	5.720	4740.842	-9.620	5.780	4048.073	-2.230	-2.400
129.	6677.685	6.110	4726.332	-10.290	6.390	4045.151	-2.510	-2.710
130.	6690.504	6.420	4710.966	-10.810	6.970	4041.681	-2.790	-3.020
131.	6703.893	6.640	4695.003	-11.160	7.520	4038.269	-3.070	-3.320
132.	6717.680	6.700	4678.658	-11.400	8.040	4034.325	-3.340	-3.630
133.	6731.696	6.830	4662.154	-11.470	8.520	4030.067	-3.520	-3.920
134.	6745.778	6.810	4645.702	-11.410	9.060	4025.116	-3.820	-4.220
135.	6759.772	6.720	4629.459	-11.210	9.400	4020.705	-4.020	-4.500
136.	6773.530	6.560	4613.729	-10.890	9.760	4015.674	-4.160	-4.770
137.	6786.917	6.340	4598.556	-10.470	10.140	4010.473	-4.300	-5.030
138.	6799.805	6.060	4584.122	-9.940	10.460	4005.162	-4.370	-5.270
139.	6812.076	5.730	4570.553	-9.330	10.750	3999.011	-4.360	-5.500
140.	6823.629	5.350	4557.952	-8.640	11.000	3994.449	-4.320	-5.700
141.	6834.362	4.930	4546.401	-7.850	11.230	3989.309	-4.190	-5.000
142.	6844.190	4.480	4535.967	-7.100	11.420	3984.433	-3.980	-4.000
143.	6853.039	3.990	4526.698	-6.270	11.550	3979.664	-3.700	-3.200
144.	6860.839	3.470	4518.627	-5.410	11.730	3975.392	-3.340	-2.400
145.	6867.556	2.930	4511.775	-4.520	11.890	3971.605	-2.990	-1.600
146.	6873.079	2.360	4506.168	-3.630	12.010	3968.385	-2.620	-.800
147.	6877.431	1.790	4501.800	-2.730	12.080	3965.802	-2.260	0.000
148.	6880.561	1.200	4498.679	-1.820	12.050	3963.914	-1.860	0.600
149.	6882.448	.600	4496.807	-.910	12.010	3962.763	-1.400	1.200

Z-PLANE (XY-PLANE) LITHIUM NIOBATE (SMITH AND WELSH)

BULK

	LNGVEL	LPHI12	LPHI13	FSPVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
150.	6863.076	-0.000	-9.380	4496.182	0.000	12.090	3962.577	0.000	-0.000
151.	6882.446	-0.600	-9.380	4496.807	.910	12.080	3962.763	.840	-0.000
152.	6880.561	-1.200	-9.360	4498.679	1.820	12.050	3963.914	1.260	-0.620
153.	6877.431	-1.790	-9.320	4501.800	2.730	12.010	3965.002	1.660	-0.500
154.	6873.079	-2.380	-9.270	4506.166	3.630	11.940	3966.385	2.420	-0.520
155.	6867.536	-2.930	-9.200	4511.779	4.520	11.850	3971.605	3.290	-0.430
156.	6860.839	-3.470	-9.120	4518.627	5.410	11.730	3975.392	3.340	-0.320
157.	6853.039	-4.000	-9.020	4526.696	6.270	11.590	3979.684	3.700	-0.200
158.	6844.190	-4.480	-8.910	4535.967	7.100	11.420	3984.333	3.900	-0.000
159.	6834.362	-4.930	-8.780	4546.401	7.890	11.230	3989.309	4.190	-0.020
160.	6823.629	-5.350	-8.620	4557.952	8.640	11.000	3994.499	4.320	-0.700
161.	6812.076	-5.730	-8.450	4570.553	9.330	10.750	3999.911	4.360	-0.500
162.	6799.805	-6.080	-8.260	4584.122	9.940	10.460	4007.162	4.370	-0.200
163.	6786.917	-6.340	-8.040	4598.556	10.470	10.140	4016.473	4.300	-0.030
164.	6773.530	-6.560	-7.800	4613.729	10.890	9.780	4025.674	4.180	-0.700
165.	6759.772	-6.720	-7.530	4629.499	11.210	9.400	4025.705	4.020	-0.500
166.	6745.776	-6.810	-7.240	4645.702	11.410	8.960	4025.516	3.820	-0.220
167.	6731.696	-6.830	-6.920	4662.154	11.470	8.520	4033.067	3.590	-0.320
168.	6717.680	-6.780	-6.570	4678.650	11.400	8.040	4034.325	3.340	-0.030
169.	6703.893	-6.640	-6.190	4695.003	11.180	7.520	4036.269	3.070	-0.320
170.	6690.504	-6.420	-5.760	4710.966	10.810	6.970	4041.001	2.750	-0.020
171.	6677.685	-6.110	-5.310	4726.322	10.290	6.350	4045.151	2.510	-0.710
172.	6665.612	-5.720	-4.830	4740.842	9.620	5.760	4049.073	2.230	-0.200
173.	6654.455	-5.230	-4.310	4754.298	8.800	5.140	4050.644	1.940	-0.100
174.	6644.384	-4.670	-3.770	4766.475	7.850	4.460	4052.066	1.660	-0.700
175.	6635.556	-4.030	-3.190	4777.166	6.760	3.770	4054.739	1.300	-0.400
176.	6628.115	-3.320	-2.590	4786.193	5.560	3.040	4056.266	1.100	-0.100
177.	6622.167	-2.540	-1.960	4793.390	4.260	2.300	4057.490	.820	-0.800
178.	6617.875	-1.720	-1.320	4798.626	2.890	1.540	4058.294	.590	-0.500
179.	6615.256	-0.870	-0.660	4801.810	1.460	.770	4058.799	.270	-0.300
180.	6614.376	0.000	-0.000	4802.876	-0.000	-0.000	4058.967	-0.000	.000

X-PLANE (YZ-PLANE) LITHIUM NIOBATE (WARNER ET AL)										BULK		
	LPM112	LPM113	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13				
0.	6054.190	0.000	4459.129	-11.930	-0.000	3994.677	6.640	-0.000				
1.	6873.916	0.000	4442.251	-12.570	-0.000	4002.512	6.610	-0.000				
2.	6894.209	0.000	4424.603	-13.110	-0.000	4010.077	6.360	-0.000				
3.	6914.944	0.000	4406.314	-13.570	-0.000	4016.565	6.140	-0.000				
4.	6936.004	0.000	4387.511	-13.950	-0.000	4025.908	5.900	-0.000				
5.	6957.274	0.000	4368.320	-14.240	-0.000	4033.076	5.650	-0.000				
6.	6978.645	0.000	4348.862	-14.450	-0.000	4038.009	5.390	-0.000				
7.	7000.011	0.000	4329.255	-14.570	-0.000	4046.334	5.140	-0.000				
8.	7021.273	0.000	4309.610	-14.620	-0.000	4052.205	4.880	-0.000				
9.	7042.335	0.000	4290.037	-14.600	-0.000	4056.450	4.610	-0.000				
10.	7063.110	0.000	4270.637	-14.500	-0.000	4064.006	4.340	-0.000				
11.	7083.513	0.000	4251.506	-14.340	-0.000	4069.224	4.070	-0.000				
12.	7103.467	0.000	4232.733	-14.110	-0.000	4074.137	3.790	-0.000				
13.	7122.901	0.000	4214.403	-13.810	-0.000	4078.650	3.510	-0.000				
14.	7141.747	0.000	4196.593	-13.460	-0.000	4082.846	3.230	-0.000				
15.	7159.946	0.000	4179.371	-13.050	-0.000	4086.696	2.950	-0.000				
16.	7177.442	0.000	4162.803	-12.590	-0.000	4090.197	2.670	-0.000				
17.	7194.185	0.000	4146.943	-12.060	-0.000	4093.340	2.380	-0.000				
18.	7210.130	0.000	4131.840	-11.530	-0.000	4096.124	2.100	-0.000				
19.	7225.236	0.000	4117.537	-10.940	-0.000	4098.546	1.800	-0.000				
20.	7239.475	0.000	4104.067	-10.320	-0.000	4100.608	1.500	-0.000				
21.	7252.812	0.000	4091.456	-9.670	0.000	4102.302	1.210	-0.000				
22.	7265.225	0.000	4079.724	-9.010	0.000	4103.630	0.920	-0.000				
23.	7276.694	0.000	4068.863	-8.330	0.000	4104.530	0.630	-0.000				
24.	7287.206	0.000	4058.935	-7.640	0.000	4105.101	0.330	-0.000				
25.	7296.750	0.000	4049.876	-6.950	0.000	4105.401	0.030	-0.000				
26.	7305.322	0.000	4041.699	-6.270	0.000	4105.252	-0.270	-0.000				
27.	7312.923	0.000	4034.360	-5.590	0.000	4104.734	-0.560	-0.000				
28.	7319.557	0.000	4027.896	-4.940	0.000	4103.546	-0.860	-0.000				
29.	7325.235	0.000	4022.211	-4.320	0.000	4102.509	-1.150	-0.000				
30.	7329.970	0.000	4017.287	-3.720	0.000	4101.566	-1.450	-0.000				
31.	7333.783	0.000	4013.075	-3.160	0.000	4100.666	-1.740	-0.000				
32.	7336.696	0.000	4009.523	-2.650	0.000	4099.837	-2.030	-0.000				
33.	7338.736	0.000	4006.571	-2.150	0.000	4098.624	-2.320	-0.000				
34.	7339.942	0.000	4004.152	-1.760	0.000	4097.909	-2.610	-0.000				
35.	7340.344	0.000	4002.196	-1.430	0.000	4097.436	-2.890	-0.000				
36.	7339.987	0.000	4000.626	-1.150	0.000	4096.836	-3.180	-0.000				
37.	7338.916	0.000	3999.361	-930	0.000	4096.624	-3.460	-0.000				
38.	7337.141	0.000	3998.326	-760	0.000	4095.917	-3.740	-0.000				
39.	7334.834	0.000	3997.425	-710	0.000	4095.205	-4.010	-0.000				
40.	7331.931	0.000	3996.565	-760	0.000	4094.200	-4.290	-0.000				
41.	7328.534	0.000	3994.631	-930	0.000	4093.562	-4.560	-0.000				
42.	7324.703	0.000	3993.364	-1.160	0.000	4093.752	-4.820	-0.000				
43.	7320.503	0.000	3991.776	-1.460	0.000	4094.176	-5.080	-0.000				
44.	7316.001	0.000	3989.777	-1.840	0.000	4094.426	-5.350	-0.000				
45.	7311.264	0.000	3987.281	-2.170	0.000	4094.374	-5.650	-0.000				
46.	7306.361	0.000	3984.204	-2.230	0.000	4094.027	-5.950	-0.000				
47.	7301.359	0.000	3980.468	-2.260	0.000	4093.394	-6.230	-0.000				
48.	7296.327	0.000	3976.001	-3.370	0.000	4092.462	-6.570	-0.000				
49.	7291.331	0.000	3976.001	-4.000	0.000	4091.462	-6.870	-0.000				

X-PLANE (YZ-PLANE) LITHIUM NIOBATE (WARNER ET AL.)

	LNQVEL	LPN12	LPN13	FSRVEL	FSN12	FSPH13	SSRVEL	SSPH12	SSPH13
50.	7286.435	-2.170	0.000	3970.737	-4.690	-0.000	3996.299	-6.000	0.000
51.	7281.701	-2.050	0.000	3966.619	-5.420	-0.000	3997.894	-7.620	0.000
52.	7277.187	-1.960	0.000	3957.596	-6.190	-0.000	3999.194	-7.640	0.000
53.	7272.947	-1.840	0.000	3949.636	-6.960	-0.000	3970.210	-7.450	0.000
54.	7269.030	-1.690	-0.000	3940.706	-7.600	-0.000	3961.030	-7.660	0.000
55.	7265.460	-1.510	-0.000	3930.792	-8.630	-0.000	3951.625	-7.660	0.000
56.	7262.335	-1.330	-0.000	3919.890	-9.450	-0.000	3942.033	-8.050	0.000
57.	7259.626	-1.120	-0.000	3908.011	-10.270	-0.000	3932.175	-8.230	0.000
58.	7257.376	-9.10	-0.000	3895.176	-11.070	-0.000	3922.151	-8.410	0.000
59.	7255.610	-6.90	-0.000	3881.423	-11.840	-0.000	3911.943	-8.560	0.000
60.	7254.332	-4.70	-0.000	3866.801	-12.560	-0.000	3901.261	-8.740	0.000
61.	7253.548	-2.40	-0.000	3851.375	-13.230	-0.000	3891.016	-8.890	0.000
62.	7253.256	-0.20	-0.000	3835.219	-13.840	-0.000	3880.321	-9.030	0.000
63.	7253.447	1.50	-0.000	3818.424	-14.360	-0.000	3869.467	-9.170	0.000
64.	7254.104	4.00	-0.000	3801.090	-14.830	-0.000	3858.526	-9.290	0.000
65.	7255.207	6.00	-0.000	3783.324	-15.200	-0.000	3847.450	-9.410	0.000
66.	7256.729	7.80	-0.000	3765.283	-15.460	-0.000	3836.272	-9.520	0.000
67.	7258.838	9.50	-0.000	3747.023	-15.620	-0.000	3825.005	-9.610	0.000
68.	7260.900	1.100	-0.000	3728.745	-15.660	-0.000	3813.882	-9.700	0.000
69.	7263.476	1.230	-0.000	3710.574	-15.590	-0.000	3802.255	-9.780	0.000
70.	7266.323	1.340	-0.000	3692.655	-15.390	-0.000	3790.795	-9.840	0.000
71.	7269.396	1.430	-0.000	3675.139	-15.060	-0.000	3779.317	-9.890	0.000
72.	7272.656	1.500	-0.000	3658.175	-14.610	-0.000	3767.793	-9.940	0.000
73.	7276.050	1.560	-0.000	3641.912	-14.010	-0.000	3756.270	-9.970	0.000
74.	7279.535	1.560	-0.000	3626.494	-13.290	-0.000	3744.753	-9.990	0.000
75.	7283.065	1.590	-0.000	3612.061	-12.430	-0.000	3733.255	-9.990	0.000
76.	7286.594	1.560	-0.000	3598.744	-11.450	-0.000	3721.791	-9.990	0.000
77.	7290.075	1.250	-0.000	3586.667	-10.340	-0.000	3710.376	-9.970	0.000
78.	7293.478	1.500	-0.000	3575.940	-9.120	-0.000	3699.023	-9.940	0.000
79.	7296.751	1.440	-0.000	3566.684	-7.790	-0.000	3687.748	-9.900	0.000
80.	7299.862	1.360	-0.000	3558.924	-6.260	-0.000	3676.564	-9.840	0.000
81.	7302.776	1.260	-0.000	3552.789	-4.900	-0.000	3665.487	-9.770	0.000
82.	7305.463	1.150	-0.000	3548.314	-3.360	-0.000	3654.530	-9.690	0.000
83.	7307.894	1.030	-0.000	3545.534	-1.780	-0.000	3643.709	-9.590	0.000
84.	7310.046	908	-0.000	3544.469	-1.190	-0.000	3633.037	-9.480	0.000
85.	7311.696	768	-0.000	3545.120	1.350	-0.000	3622.529	-9.360	0.000
86.	7313.433	620	-0.000	3547.470	2.950	-0.000	3612.230	-9.220	0.000
87.	7314.639	470	-0.000	3551.846	4.460	-0.000	3602.063	-9.070	0.000
88.	7315.505	310	-0.000	3557.117	5.900	-0.000	3592.133	-8.900	0.000
89.	7316.026	160	-0.000	3564.296	7.260	-0.000	3582.424	-8.720	0.000
90.	7316.200	-0.000	-0.000	3572.948	8.530	-0.000	3572.448	-8.530	0.000
91.	7316.027	-150	-0.000	3582.973	9.690	-0.000	3563.720	-8.320	-0.000
92.	7315.512	-310	-0.000	3594.268	10.730	-0.000	3554.753	-8.100	-0.000
93.	7314.663	-460	-0.000	3606.718	11.660	-0.000	3546.060	-7.870	-0.000
94.	7313.486	-600	-0.000	3620.199	12.450	-0.000	3537.653	-7.620	-0.000
95.	7312.001	-740	-0.000	3634.584	13.120	-0.000	3529.544	-7.360	-0.000
96.	7310.215	-870	-0.000	3649.736	13.670	-0.000	3521.747	-7.100	0.000
97.	7308.147	-990	-0.000	3665.522	14.090	-0.000	3514.271	-6.800	0.000
98.	7305.815	-1.100	-0.000	3681.833	14.530	-0.000	3507.530	-6.500	0.000
99.	7303.237	-1.210	-0.000	3698.443	14.970	-0.000	3500.332	-6.190	0.000

BULK

X-PLANE (YZ-PLANE) LITHIUM NIOBATE (WARNER ET AL)

BULK

	LNWEL	LPW12	LPW13	FSPWEL	FSPW12	FSPW13	SSRWEL	SSPW12	SSPW13
100.	7300.431	-1.310	-0.000	3715.311	14.640	0.000	3493.889	-5.860	0.000
101.	7297.417	-1.400	-0.000	3732.276	14.610	0.000	3487.610	-5.930	0.000
102.	7294.213	-1.460	-0.000	3749.221	14.470	0.000	3482.106	-5.150	0.000
103.	7290.837	-1.560	-0.000	3766.025	14.250	0.000	3476.783	-4.630	0.000
104.	7287.306	-1.620	-0.000	3782.582	13.950	0.000	3471.852	-4.470	0.000
105.	7283.634	-1.680	-0.000	3798.796	13.580	0.000	3467.319	-4.090	0.000
106.	7279.835	-1.740	-0.000	3814.575	13.140	0.000	3463.131	-3.710	0.000
107.	7275.920	-1.750	-0.000	3829.856	12.650	0.000	3459.476	-3.320	0.000
108.	7271.855	-1.540	-0.000	3844.561	12.110	0.000	3456.179	-2.930	0.000
109.	7267.767	-1.890	-0.000	3858.642	11.540	0.000	3453.304	-2.530	0.000
110.	7263.537	-1.930	-0.000	3872.059	10.950	0.000	3450.858	-2.120	0.000
111.	7259.205	-1.960	-0.000	3884.783	10.340	0.000	3448.843	-1.710	0.000
112.	7254.767	-2.030	-0.000	3896.800	9.730	0.000	3447.263	-1.300	0.000
113.	7250.215	-2.050	-0.000	3908.106	9.120	0.000	3446.120	-0.880	0.000
114.	7245.539	-2.150	-0.000	3918.708	8.530	0.000	3445.417	-0.460	0.000
115.	7240.725	-2.210	-0.000	3928.626	7.960	0.000	3445.154	-0.040	0.000
116.	7235.756	-2.290	-0.000	3937.840	7.420	0.000	3445.331	0.360	0.000
117.	7230.619	-2.370	-0.000	3946.535	6.920	0.000	3445.949	0.800	0.000
118.	7225.288	-2.470	-0.000	3954.622	6.460	0.000	3447.027	1.220	0.000
119.	7219.741	-2.570	-0.000	3962.195	6.060	0.000	3448.502	1.630	0.000
120.	7213.956	-2.650	-0.000	3969.324	5.710	0.000	3450.432	2.040	0.000
121.	7207.907	-2.820	-0.000	3976.078	5.430	0.000	3452.795	2.450	0.000
122.	7201.560	-2.960	0.000	3982.532	5.190	0.000	3455.587	2.850	0.000
123.	7194.915	-3.110	0.000	3988.766	5.050	0.000	3458.802	3.250	0.000
124.	7187.922	-3.270	0.000	3994.863	4.960	0.000	3462.437	3.640	0.000
125.	7180.564	-3.450	0.000	4000.906	4.950	0.000	3466.484	4.020	0.000
126.	7172.817	-3.630	0.000	4006.982	5.000	0.000	3470.939	4.390	0.000
127.	7164.659	-3.830	0.000	4013.173	5.120	0.000	3475.794	4.760	0.000
128.	7156.070	-4.040	0.000	4019.565	5.310	0.000	3481.041	5.120	0.000
129.	7147.033	-4.250	0.000	4026.238	5.560	0.000	3486.672	5.480	0.000
130.	7137.530	-4.470	0.000	4033.269	5.870	0.000	3492.670	5.800	0.000
131.	7127.551	-4.700	0.000	4040.733	6.230	0.000	3499.051	6.120	0.000
132.	7117.084	-4.930	0.000	4048.696	6.650	0.000	3505.761	6.440	0.000
133.	7106.125	-5.160	0.000	4057.222	7.110	0.000	3512.856	6.740	0.000
134.	7094.671	-5.400	0.000	4066.367	7.600	0.000	3520.288	7.030	0.000
135.	7082.722	-5.630	0.000	4076.178	8.130	0.000	3528.003	7.310	0.000
136.	7070.286	-5.870	0.000	4086.696	8.660	0.000	3536.022	7.570	0.000
137.	7057.372	-6.090	0.000	4097.953	9.240	0.000	3544.402	7.820	0.000
138.	7043.994	-6.310	0.000	4109.971	9.810	0.000	3553.041	8.060	0.000
139.	7030.171	-6.530	0.000	4122.765	10.360	0.000	3561.956	8.280	0.000
140.	7015.927	-6.730	0.000	4136.337	10.940	0.000	3571.134	8.490	0.000
141.	7001.292	-6.920	0.000	4150.681	11.450	0.000	3580.562	8.690	0.000
142.	6986.299	-7.090	0.000	4165.782	12.010	0.000	3590.226	8.840	0.000
143.	6970.987	-7.240	0.000	4181.613	12.500	0.000	3600.116	9.040	0.000
144.	6955.403	-7.370	0.000	4198.137	12.950	0.000	3610.214	9.190	0.000
145.	6939.595	-7.480	0.000	4215.306	13.360	0.000	3620.507	9.330	0.000
146.	6923.620	-7.560	-0.000	4233.063	13.710	0.000	3630.901	9.460	0.000
147.	6907.540	-7.610	-0.000	4251.342	14.010	0.000	3641.822	9.570	0.000
148.	6891.423	-7.630	-0.000	4270.064	14.240	0.000	3652.415	9.678	0.000
149.	6875.342	-7.610	-0.000	4289.142	14.400	0.000	3663.347	9.760	0.000

X-PLANE (YZ-PLANE) LITHIUM NIOBATE (WARNER ET AL)

BULK

	LNGBL	LPM12	LPM13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
150.	6859.376	-7.560	-0.000	4308.442	14.490	0.000	3674.432	9.033	0.000
151.	6843.610	-7.460	-0.000	4327.977	14.530	0.000	3655.560	9.090	0.000
152.	6826.135	-7.320	-0.000	4347.515	14.430	0.000	3636.625	9.930	-0.000
153.	6813.045	-7.120	-0.000	4366.975	14.270	0.000	3706.163	9.970	0.000
154.	6798.442	-6.860	-0.000	4386.230	14.020	0.000	3713.566	9.990	0.000
155.	6784.426	-6.590	-0.000	4405.146	13.670	0.000	3731.023	9.990	0.000
156.	6771.113	-6.240	-0.000	4423.590	13.230	0.000	3742.515	9.990	0.000
157.	6758.605	-5.840	-0.000	4441.416	12.700	0.000	3754.030	9.970	0.000
158.	6747.015	-5.380	-0.000	4458.485	12.070	0.000	3765.573	9.940	0.000
159.	6736.455	-4.870	-0.000	4474.653	11.350	0.000	3777.070	9.900	0.000
160.	6727.032	-4.300	-0.000	4489.781	10.530	0.000	3788.567	9.850	0.000
161.	6718.853	-3.670	-0.000	4503.732	9.620	0.000	3798.032	9.790	0.000
162.	6712.015	-3.000	-0.000	4516.377	8.620	0.000	3811.449	9.720	0.000
163.	6706.611	-2.350	-0.000	4527.595	7.550	0.000	3822.805	9.630	0.000
164.	6702.721	-1.620	-0.000	4537.277	6.400	0.000	3834.086	9.540	0.000
165.	6700.415	-0.730	-0.000	4545.325	5.190	0.000	3845.284	9.430	0.000
166.	6699.748	0.000	-0.000	4551.660	3.930	0.000	3856.361	9.320	0.000
167.	6700.760	1.910	-0.000	4556.219	2.630	0.000	3867.365	9.190	0.000
168.	6703.473	1.750	-0.000	4558.955	1.310	0.000	3878.225	9.060	0.000
169.	6707.092	2.560	-0.000	4559.846	-0.030	0.000	3888.948	8.920	0.000
170.	6714.004	3.390	-0.000	4558.885	-1.360	0.000	3893.523	8.770	0.000
171.	6721.778	4.150	-0.000	4556.066	-2.670	0.000	3903.337	8.610	0.000
172.	6731.167	4.950	-0.000	4551.469	-3.950	0.000	3912.100	8.440	0.000
173.	6742.106	5.670	-0.000	4545.141	-5.190	0.000	3920.541	8.270	0.000
174.	6754.517	6.350	-0.000	4537.113	-6.370	0.000	3928.108	8.060	0.000
175.	6768.310	6.970	-0.000	4527.408	-7.490	0.000	3935.770	7.890	0.000
176.	6783.382	7.540	-0.000	4516.364	-8.540	0.000	3943.219	7.700	0.000
177.	6799.624	8.050	-0.000	4503.848	-9.510	0.000	3950.444	7.490	0.000
178.	6816.920	8.500	-0.000	4490.059	-10.410	0.000	3957.434	7.280	0.000
179.	6835.150	8.890	-0.000	4475.106	-11.210	0.000	3964.182	7.070	0.000
180.	6854.198	9.210	-0.000	4459.129	-11.930	0.000	3970.677	6.840	0.000

Y-PLANE (XZ-PLANE) LITHIUM NIOBATE (WARNER ET AL)

BULK

	LPH12	LPH13	FSRWEL	FSPH12	FSPH13	SSRWEL	SSPH12	SSPH13
0.	0.000	0.000	4794.767	0.000	0.000	4073.205	0.000	0.000
1.	0.000	0.000	4793.794	-1.330	-1.460	4073.972	-1.380	-1.480
2.	1.750	1.310	4790.083	-2.650	-1.460	4076.271	-1.750	-1.750
3.	2.600	1.950	4786.067	-3.940	-2.200	4077.105	-1.120	-1.630
4.	3.420	2.570	4779.397	-5.190	-2.650	4075.476	-1.450	1.100
5.	4.150	3.160	4770.942	-6.390	-3.540	4073.396	-1.860	1.370
6.	4.920	3.720	4760.789	-7.520	-4.160	4070.866	-2.220	1.630
7.	5.550	4.250	4749.036	-8.590	-4.730	4067.096	-2.570	1.800
8.	6.210	4.740	4735.793	-9.500	-5.260	4064.497	-2.910	2.110
9.	6.760	5.190	4721.176	-10.430	-5.720	4060.601	-3.250	2.410
10.	7.250	5.600	4705.313	-11.330	-6.140	4056.463	-3.570	2.690
11.	7.660	5.970	4688.324	-12.000	-6.490	4051.050	-3.880	2.930
12.	8.050	6.300	4670.339	-12.750	-6.790	4046.063	-4.170	3.130
13.	8.350	6.590	4651.401	-13.340	-7.030	4041.500	-4.450	3.300
14.	8.600	6.840	4631.072	-13.860	-7.210	4037.910	-4.710	3.590
15.	8.750	7.050	4611.631	-14.300	-7.340	4024.956	-4.950	3.810
16.	8.930	7.230	4590.866	-14.660	-7.410	4023.724	-5.100	4.020
17.	9.020	7.370	4569.691	-14.950	-7.430	4017.241	-5.360	4.210
18.	9.060	7.460	4548.157	-15.240	-7.400	4010.536	-5.550	4.470
19.	9.070	7.560	4526.479	-15.430	-7.320	4003.641	-5.710	4.690
20.	9.030	7.610	4504.622	-15.570	-7.190	3996.505	-5.830	4.890
21.	8.950	7.640	4482.703	-15.660	-7.030	3989.402	-5.930	5.060
22.	8.840	7.640	4460.792	-15.700	-6.820	3982.123	-6.010	5.210
23.	8.710	7.620	4438.954	-15.700	-6.580	3974.783	-6.060	5.440
24.	8.540	7.580	4417.245	-15.670	-6.320	3967.412	-6.080	5.700
25.	8.350	7.520	4395.716	-15.600	-6.020	3960.041	-6.060	6.100
26.	8.140	7.440	4374.414	-15.500	-5.710	3952.690	-6.000	6.410
27.	7.910	7.340	4353.390	-15.370	-5.370	3945.409	-6.010	6.410
28.	7.670	7.230	4332.670	-15.210	-5.030	3938.196	-5.950	6.670
29.	7.410	7.100	4312.295	-15.020	-4.660	3931.077	-5.800	6.950
30.	7.140	6.960	4292.297	-14.800	-4.320	3924.063	-5.600	7.250
31.	6.860	6.810	4272.710	-14.560	-3.970	3917.102	-5.720	7.590
32.	6.570	6.640	4253.566	-14.290	-3.630	3910.373	-5.640	7.940
33.	6.270	6.470	4234.696	-13.990	-3.250	3903.606	-5.570	8.210
34.	5.960	6.260	4216.736	-13.670	-2.820	3897.085	-5.510	8.600
35.	5.660	6.030	4199.119	-13.310	-2.460	3890.546	-5.460	8.910
36.	5.360	5.890	4182.084	-12.910	-2.410	3884.033	-5.490	9.210
37.	5.060	5.680	4165.670	-12.480	-2.170	3877.505	-5.530	9.510
38.	4.790	5.470	4149.917	-12.010	-1.950	3870.911	-5.620	9.810
39.	4.500	5.250	4134.067	-11.500	-1.760	3864.192	-5.760	10.110
40.	4.220	5.030	4120.560	-10.960	-1.610	3857.289	-5.920	10.480
41.	3.950	4.810	4108.031	-10.380	-1.460	3850.136	-6.200	10.810
42.	3.690	4.580	4094.310	-9.770	-1.370	3842.673	-6.500	11.140
43.	3.440	4.350	4082.418	-9.150	-1.290	3834.842	-6.840	11.460
44.	3.200	4.120	4071.359	-8.520	-1.230	3826.596	-7.220	11.790
45.	2.970	3.890	4061.124	-7.900	-1.170	3817.902	-7.630	12.090
46.	2.760	3.660	4051.682	-7.300	-1.130	3808.742	-8.040	12.370
47.	2.560	3.430	4042.984	-6.750	-1.050	3799.114	-8.460	12.610
48.	2.360	3.200	4034.963	-6.250	-1.050	3789.035	-8.890	12.830
49.	2.210	2.980	4027.535	-5.820	-1.020	3779.536	-9.210	13.000

Y-PLANE (XZ-PLANE) LITHIUM NIOBATE (WARNER ET AL)

BULK

	LPM12	LPM13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
50.	2.060	2.760	4020.603	-5.470	-1.000	3767.660	-9.540	16.140
51.	1.930	2.550	4014.063	-5.200	-1.560	3756.460	-9.620	16.440
52.	1.810	2.340	4007.603	-5.030	-1.560	3744.999	-10.040	16.710
53.	1.710	2.140	4001.714	-4.940	-1.990	3733.328	-10.220	16.940
54.	1.630	1.940	3995.605	-4.950	-1.020	3721.521	-10.340	17.130
55.	1.560	1.760	3989.612	-5.030	-1.070	3709.636	-10.420	17.20
56.	1.510	1.580	3983.396	-5.190	-1.140	3697.733	-10.440	17.420
57.	1.420	1.410	3976.947	-5.430	-1.240	3685.670	-10.420	17.520
58.	1.350	1.250	3970.183	-5.720	-1.360	3674.101	-10.340	17.560
59.	1.440	1.100	3963.031	-6.060	-1.510	3662.479	-10.230	17.610
60.	1.440	.960	3955.429	-6.400	-1.670	3651.052	-10.070	17.610
61.	1.400	.820	3947.323	-6.930	-1.660	3639.066	-9.870	17.610
62.	1.470	.700	3938.672	-7.410	-2.170	3628.966	-9.630	17.500
63.	1.490	.590	3929.443	-7.910	-2.500	3618.393	-9.350	17.360
64.	1.520	.490	3919.617	-8.420	-2.550	3608.187	-9.030	17.230
65.	1.550	.400	3909.181	-8.950	-2.860	3598.307	-8.600	17.040
66.	1.550	.320	3898.136	-9.470	-3.070	3589.030	-8.290	16.800
67.	1.620	.250	3886.490	-9.960	-3.340	3580.153	-7.960	16.520
68.	1.640	.190	3874.262	-10.400	-3.600	3571.704	-7.400	16.200
69.	1.670	.140	3861.480	-10.960	-3.860	3563.773	-6.960	15.830
70.	1.690	.100	3848.181	-11.400	-4.120	3556.736	-6.370	15.420
71.	1.700	.060	3834.409	-11.810	-4.350	3550.116	-5.810	14.990
72.	1.700	.030	3820.216	-12.170	-4.570	3544.135	-5.210	14.440
73.	1.700	.010	3805.661	-12.490	-4.750	3538.035	-4.590	13.800
74.	1.680	.010	3790.806	-12.760	-4.910	3531.830	-3.940	13.200
75.	1.650	.030	3775.726	-12.970	-5.030	3525.366	-3.250	12.630
76.	1.610	.030	3760.467	-13.120	-5.100	3527.255	-2.530	11.940
77.	1.560	.040	3745.166	-13.200	-5.110	3524.426	-1.790	11.200
78.	1.500	.040	3729.847	-13.220	-5.110	3523.407	-1.030	10.430
79.	1.420	.040	3714.603	-13.160	-5.030	3522.714	-.250	9.620
80.	1.330	.040	3699.515	-13.070	-4.850	3522.668	.540	8.770
81.	1.240	.030	3684.660	-12.890	-4.690	3523.007	1.360	7.910
82.	1.130	.030	3670.116	-12.640	-4.420	3523.783	2.160	7.020
83.	1.010	.020	3655.951	-12.330	-4.050	3525.763	3.000	6.110
84.	.880	.020	3642.250	-11.950	-3.690	3528.246	3.630	5.200
85.	.750	.010	3629.066	-11.510	-3.230	3536.623	4.650	4.230
86.	.610	.010	3616.465	-11.020	-2.700	3542.297	5.470	3.300
87.	.460	.010	3604.504	-10.470	-2.110	3546.660	6.270	2.500
88.	.310	.000	3593.234	-9.870	-1.460	3550.901	7.050	1.630
89.	.160	.000	3582.702	-9.220	-.750	3564.005	7.610	.800
90.	-.000	.000	3572.946	-8.530	0.000	3572.948	8.000	.000
91.	-.160	.000	3564.005	-7.810	1.630	3582.702	9.220	-.750
92.	-.310	.000	3555.901	-7.050	3.230	3593.234	9.870	-1.460
93.	-.460	.010	3548.660	-6.270	4.650	3604.504	10.470	-2.110
94.	-.610	.010	3542.297	-5.470	5.470	3616.465	11.020	-2.700
95.	-.750	.010	3536.623	-4.650	6.270	3629.066	11.510	-3.230
96.	-.880	.020	3532.246	-3.830	7.050	3642.250	11.950	-3.690
97.	-1.010	.020	3528.567	-3.006	7.610	3655.955	12.330	-4.050
98.	-1.130	.030	3525.783	-2.160	7.910	3670.116	12.640	-4.420
99.	-1.240	.030	3523.007	-1.360	7.510	3684.660	12.890	-4.630

Y-PLANE (XZ-PLANE) LITHIUM NIOBATE (WARNER ET AL)

BULK

	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	-1.330	-0.040	3222.060	-0.540	8.770	3694.515	13.070	-7.090
101.	-1.420	-0.040	3222.714	1.250	9.620	3714.603	13.100	-7.030
102.	-1.500	-0.040	3223.407	1.030	10.430	3729.647	13.220	-7.110
103.	-1.560	-0.040	3224.920	1.790	11.200	3745.160	13.200	-7.130
104.	-1.610	-0.030	3227.255	2.530	11.540	3760.487	13.120	-7.110
105.	-1.650	-0.030	3230.366	3.250	12.630	3775.726	12.970	-7.030
106.	-1.680	-0.010	3234.235	3.930	13.260	3790.800	12.760	-6.910
107.	-1.700	-0.010	3238.035	4.590	13.690	3805.661	12.490	-6.750
108.	-1.700	-0.030	3244.139	5.210	14.440	3820.216	12.170	-6.520
109.	-1.700	-0.060	3250.116	5.810	14.950	3834.409	11.810	-6.350
110.	-1.690	-0.100	3256.730	6.370	15.420	3848.141	11.400	-6.120
111.	-1.670	-0.140	3263.973	6.900	15.830	3861.400	10.960	-5.860
112.	-1.640	-0.190	3271.785	7.400	16.200	3874.262	10.400	-5.600
113.	-1.620	-0.250	3280.153	7.860	16.520	3886.490	9.950	-5.340
114.	-1.590	-0.320	3289.030	8.290	16.800	3898.136	9.470	-5.070
115.	-1.550	-0.400	3298.307	8.660	17.040	3909.181	8.950	-4.800
116.	-1.520	-0.440	3308.187	9.030	17.230	3919.617	8.420	-4.530
117.	-1.490	-0.590	3318.393	9.350	17.360	3929.443	7.910	-4.260
118.	-1.470	-0.780	3328.966	9.630	17.500	3938.672	7.410	-3.990
119.	-1.450	-0.820	3339.066	9.870	17.570	3947.323	6.930	-3.720
120.	-1.440	-0.960	3351.052	10.070	17.610	3955.429	6.460	-3.450
121.	-1.440	-1.100	3362.479	10.230	17.610	3963.031	6.000	-3.180
122.	-1.450	-1.250	3374.101	10.340	17.560	3970.103	5.530	-2.910
123.	-1.480	-1.410	3385.873	10.420	17.420	3976.547	5.070	-2.640
124.	-1.510	-1.580	3397.830	10.440	17.420	3983.396	4.620	-2.370
125.	-1.560	-1.760	3409.636	10.420	17.250	3989.612	4.170	-2.100
126.	-1.630	-1.940	3421.521	10.340	17.130	3995.685	3.720	-1.830
127.	-1.710	-2.140	3433.328	10.220	16.940	4001.714	3.270	-1.560
128.	-1.810	-2.340	3444.995	10.040	16.710	4007.603	2.820	-1.290
129.	-1.930	-2.550	3456.460	9.820	16.440	4014.063	2.370	-1.020
130.	-2.060	-2.760	3467.660	9.540	16.140	4020.603	1.920	-0.750
131.	-2.210	-2.980	3478.536	9.210	15.800	4027.535	1.470	-0.480
132.	-2.380	-3.200	3489.035	8.850	15.430	4034.963	1.020	-0.210
133.	-2.560	-3.430	3499.114	8.460	15.010	4042.984	0.570	0.060
134.	-2.760	-3.660	3508.742	8.040	14.570	4051.682	0.120	0.330
135.	-2.970	-3.890	3517.902	7.630	14.090	4061.124	-0.330	0.600
136.	-3.200	-4.120	3526.596	7.220	13.590	4071.359	-0.780	0.870
137.	-3.440	-4.350	3534.842	6.800	13.070	4082.416	-1.230	1.140
138.	-3.690	-4.580	3542.673	6.500	12.540	4094.310	-1.680	1.410
139.	-3.950	-4.810	3550.136	6.200	12.010	4107.031	-2.130	1.680
140.	-4.220	-5.030	3557.249	5.950	11.480	4120.567	-2.580	1.950
141.	-4.500	-5.250	3564.192	5.760	10.960	4134.867	-3.030	2.220
142.	-4.790	-5.470	3570.911	5.620	10.450	4149.117	-3.480	2.490
143.	-5.080	-5.680	3577.505	5.530	9.970	4163.670	-3.930	2.760
144.	-5.360	-5.890	3584.033	5.490	9.510	4178.084	-4.380	3.030
145.	-5.680	-6.090	3590.546	5.480	9.070	4192.119	-4.830	3.300
146.	-5.960	-6.280	3597.085	5.510	8.650	4216.736	-5.280	3.570
147.	-6.270	-6.470	3593.686	5.570	8.270	4231.896	-5.730	3.840
148.	-6.570	-6.640	3590.373	5.640	7.900	4247.566	-6.180	4.110
149.	-6.860	-6.810	3587.162	5.720	7.560	4272.710	-6.630	4.380

Y-PLANE (XZ-PLANE) LITHIUM NIOBATE (WARNER ET AL)									
					BULK				
	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13	
150.	-7.140	6.960	3924.063	5.800	7.240	4292.297	14.600	-4.320	
151.	-7.410	7.100	3931.077	5.800	6.550	4312.295	15.020	-4.000	
152.	-7.670	7.230	3938.196	5.950	6.670	4332.670	15.210	-3.000	
153.	-7.910	7.340	3945.409	6.010	6.610	4353.390	15.370	-2.370	
154.	-8.140	7.440	3952.698	6.060	6.160	4374.419	15.500	-1.710	
155.	-8.350	7.520	3960.041	6.060	5.920	4395.710	15.600	-1.020	
156.	-8.540	7.560	3967.412	6.080	5.700	4417.245	15.670	-0.320	
157.	-8.710	7.620	3974.783	6.080	5.460	4438.954	15.700	0.580	
158.	-8.840	7.640	3982.123	6.010	5.270	4460.792	15.700	1.000	
159.	-8.950	7.640	3989.402	5.930	5.060	4482.703	15.600	1.000	
160.	-9.030	7.610	3996.585	5.830	4.850	4504.622	15.570	1.000	
161.	-9.070	7.560	4003.641	5.710	4.650	4526.479	15.430	1.000	
162.	-9.060	7.480	4010.536	5.550	4.440	4548.197	15.240	1.000	
163.	-9.020	7.370	4017.241	5.380	4.240	4569.691	14.990	1.000	
164.	-8.930	7.230	4023.724	5.180	4.020	4590.906	14.600	1.000	
165.	-8.790	7.080	4029.956	4.960	3.810	4611.631	14.300	1.000	
166.	-8.600	6.940	4035.910	4.710	3.590	4631.872	13.860	1.000	
167.	-8.350	6.590	4041.560	4.450	3.360	4651.491	13.340	1.000	
168.	-8.050	6.300	4046.883	4.170	3.130	4670.339	12.750	1.000	
169.	-7.660	5.970	4051.856	3.860	2.900	4688.324	12.000	1.000	
170.	-7.250	5.600	4056.463	3.510	2.650	4705.313	11.330	1.000	
171.	-6.760	5.190	4060.691	3.250	2.410	4721.170	10.490	1.000	
172.	-6.210	4.740	4064.497	2.910	2.150	4735.793	9.500	1.000	
173.	-5.590	4.250	4067.896	2.570	1.900	4749.036	8.550	1.000	
174.	-4.920	3.720	4070.866	2.220	1.630	4760.709	7.520	1.000	
175.	-4.190	3.160	4073.396	1.860	1.370	4770.942	6.390	1.000	
176.	-3.420	2.570	4075.478	1.490	1.100	4779.397	5.150	1.000	
177.	-2.600	1.950	4077.105	1.120	0.830	4786.067	3.940	1.000	
178.	-1.750	1.310	4078.271	0.750	0.550	4790.883	2.650	1.000	
179.	-0.860	0.660	4078.972	0.360	0.260	4793.794	1.330	1.000	
180.	-0.000	0.000	4079.205	-0.000	-0.000	4794.767	-0.000	0.000	

Z-PLANE (XY-PLANE) LITHIUM NIOBATE (WARNER ET AL)

BULK

	LMVEL	LPH12	LPH13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	6372.023	0.000	0.000	4794.767	0.000	0.000	4079.205	0.000	0.000
1.	6372.957	0.930	-0.660	4793.601	-1.590	0.740	4079.071	-0.220	-0.200
2.	6375.740	1.040	-1.310	4790.125	-3.160	1.480	4078.669	-0.430	-0.500
3.	6380.321	2.720	-1.950	4784.404	-4.660	2.210	4077.996	-0.650	-0.830
4.	6386.615	3.540	-2.570	4776.543	-6.060	2.920	4077.050	-0.870	-1.120
5.	6394.510	4.300	-3.170	4766.684	-7.400	3.620	4075.026	-1.100	-1.400
6.	6403.068	4.960	-3.740	4755.802	-8.590	4.290	4074.320	-1.330	-1.690
7.	6414.533	5.570	-4.280	4741.697	-9.630	4.930	4072.526	-1.560	-1.900
8.	6426.333	6.070	-4.790	4726.990	-10.530	5.550	4070.440	-1.800	-2.200
9.	6439.086	6.490	-5.270	4711.117	-11.260	6.140	4068.056	-2.040	-2.500
10.	6452.615	6.800	-5.710	4694.323	-11.640	6.700	4065.372	-2.290	-2.800
11.	6466.725	7.030	-6.120	4676.856	-12.250	7.240	4062.387	-2.530	-3.100
12.	6481.236	7.160	-6.490	4658.964	-12.500	7.740	4059.102	-2.770	-3.400
13.	6495.974	7.210	-6.840	4640.886	-12.590	8.220	4055.526	-3.010	-3.600
14.	6710.762	7.180	-7.150	4622.860	-12.530	8.670	4051.071	-3.230	-4.110
15.	6725.441	7.060	-7.430	4605.097	-12.320	9.090	4047.557	-3.430	-4.410
16.	6739.859	6.900	-7.690	4587.802	-11.990	9.460	4043.213	-3.610	-4.710
17.	6753.873	6.660	-7.920	4571.157	-11.520	9.650	4038.870	-3.750	-4.950
18.	6767.353	6.360	-8.130	4555.324	-10.950	10.160	4034.800	-3.840	-5.200
19.	6780.179	6.010	-8.320	4540.441	-10.260	10.460	4029.239	-3.890	-5.450
20.	6792.241	5.610	-8.490	4526.624	-9.526	10.750	4024.466	-3.870	-5.740
21.	6803.441	5.170	-8.630	4513.966	-8.700	10.950	4019.760	-3.790	-5.990
22.	6813.692	4.690	-8.760	4502.545	-7.820	11.210	4015.206	-3.630	-6.250
23.	6822.914	4.170	-8.870	4492.406	-6.900	11.390	4010.902	-3.400	-6.500
24.	6831.041	3.630	-8.960	4483.588	-5.940	11.540	4006.933	-3.090	-6.750
25.	6838.015	3.060	-9.040	4476.115	-4.970	11.660	4003.392	-2.700	-6.990
26.	6843.786	2.470	-9.100	4469.997	-3.950	11.760	4000.365	-2.250	-7.200
27.	6848.315	1.870	-9.150	4465.240	-2.950	11.840	3997.926	-1.740	-7.390
28.	6851.572	1.250	-9.190	4461.844	-2.000	11.890	3996.137	-1.190	-7.560
29.	6853.535	0.630	-9.210	4459.807	-1.000	11.920	3995.045	-0.620	-7.680
30.	6854.190	-0.000	-9.210	4459.129	-0.000	11.930	3994.677	0.000	-7.750
31.	6853.535	-0.630	-9.210	4459.807	1.000	11.920	3995.045	0.620	-7.780
32.	6851.572	-1.250	-9.190	4461.844	2.000	11.840	3997.926	1.190	-7.800
33.	6848.315	-1.870	-9.150	4465.240	2.950	11.640	4000.365	1.740	-7.750
34.	6843.786	-2.470	-9.100	4469.997	3.950	11.390	4003.392	2.250	-7.600
35.	6838.015	-3.060	-9.040	4476.115	4.970	11.660	4006.933	2.700	-7.350
36.	6831.041	-3.630	-8.960	4483.588	5.940	11.540	4010.902	3.090	-7.000
37.	6822.914	-4.170	-8.870	4492.406	6.900	11.390	4015.206	3.400	-6.550
38.	6813.692	-4.690	-8.760	4502.545	7.820	11.210	4019.760	3.630	-6.140
39.	6803.441	-5.170	-8.630	4513.966	8.700	10.950	4024.466	3.790	-5.700
40.	6792.241	-5.610	-8.490	4526.624	9.520	10.750	4029.239	3.870	-5.250
41.	6780.179	-6.010	-8.320	4540.441	10.260	10.460	4034.800	3.890	-4.750
42.	6767.353	-6.360	-8.130	4555.324	10.950	10.160	4038.870	3.840	-4.200
43.	6753.873	-6.660	-7.920	4571.157	11.520	9.650	4043.213	3.750	-3.650
44.	6739.859	-6.900	-7.690	4587.802	11.990	9.460	4047.557	3.610	-3.100
45.	6725.441	-7.060	-7.430	4605.097	12.320	9.090	4051.071	3.430	-2.450
46.	6710.762	-7.180	-7.150	4622.860	12.530	8.670	4055.526	3.230	-1.700
47.	6695.974	-7.210	-6.840	4640.886	12.590	8.220	4059.102	3.010	-0.950
48.	6681.236	-7.160	-6.490	4658.964	12.500	7.740	4062.387	2.770	-0.200
49.	6666.725	-7.030	-6.120	4676.856	12.250	7.240	4065.372	2.530	0.000

Z-PLANE (XY-PLANE) LITHIUM NIOBATE (WARNER ET AL)

BULK

	LNGL	LNGL12	LNGL13	FSRWEL	FSPW12	FSPW13	SSRWEL	SSPW12	SSPW13
50.	6652.615	-6.800	-5.710	4694.323	11.840	6.700	4065.372	2.250	-2.600
51.	6639.088	-6.490	-5.270	4711.117	11.260	6.140	4068.056	2.040	-2.560
52.	6626.333	-6.070	-4.790	4726.990	10.530	5.550	4070.440	1.800	-2.200
53.	6614.533	-5.570	-4.280	4741.697	9.630	4.930	4072.526	1.560	-1.900
54.	6603.868	-4.960	-3.740	4755.002	8.590	4.290	4074.320	1.330	-1.690
55.	6594.510	-4.300	-3.170	4766.684	7.400	3.620	4075.826	1.100	-1.400
56.	6586.615	-3.540	-2.570	4776.543	6.060	2.920	4077.050	0.870	-1.120
57.	6580.321	-2.720	-1.950	4784.404	4.660	2.210	4077.996	0.650	-0.830
58.	6575.740	-1.840	-1.310	4790.125	3.160	1.460	4078.669	0.430	-0.500
59.	6572.957	-930	-660	4793.601	1.590	740	4079.071	0.220	-0.200
60.	6572.823	0.000	-0.000	4794.767	0.000	-0.000	4079.205	0.000	0.000
61.	6572.957	930	660	4793.601	-1.590	-740	4079.071	-0.220	-0.200
62.	6575.740	1.840	1.310	4790.125	-3.160	-1.460	4078.669	-0.430	-0.500
63.	6580.321	2.720	1.950	4784.404	-4.660	-2.210	4077.996	-0.650	-0.830
64.	6586.615	3.540	2.570	4776.543	-6.060	-2.920	4077.050	-0.870	-1.120
65.	6594.510	4.300	3.170	4766.684	-7.400	-3.620	4075.826	-1.100	-1.400
66.	6603.868	4.960	3.740	4755.002	-8.590	-4.290	4074.320	-1.330	-1.690
67.	6614.533	5.570	4.280	4741.697	-9.630	-4.930	4072.526	-1.560	-1.900
68.	6626.333	6.070	4.790	4726.990	-10.530	-5.550	4070.440	-1.800	-2.200
69.	6639.088	6.490	5.270	4711.117	-11.260	-6.140	4068.056	-2.040	-2.560
70.	6652.615	6.800	5.710	4694.323	-11.840	-6.700	4065.372	-2.250	-2.600
71.	6666.725	7.030	6.120	4676.856	-12.260	-7.240	4062.387	-2.430	-2.730
72.	6681.238	7.160	6.490	4658.964	-12.500	-7.740	4059.102	-2.570	-2.840
73.	6695.974	7.210	6.840	4640.868	-12.590	-8.220	4055.526	-2.680	-2.910
74.	6710.762	7.100	7.150	4622.860	-12.530	-8.670	4051.671	-2.730	-2.940
75.	6725.441	7.060	7.430	4605.097	-12.320	-9.090	4047.557	-2.830	-3.010
76.	6739.859	6.900	7.690	4587.802	-11.990	-9.480	4043.213	-2.910	-3.060
77.	6753.873	6.660	7.920	4571.157	-11.520	-9.850	4038.678	-3.000	-3.100
78.	6767.353	6.360	8.130	4555.324	-10.950	-10.160	4034.000	-3.090	-3.150
79.	6780.179	6.010	8.320	4540.441	-10.260	-10.460	4029.239	-3.180	-3.200
80.	6792.241	5.610	8.490	4526.624	-9.520	-10.710	4024.466	-3.270	-3.250
81.	6803.441	5.170	8.630	4513.968	-8.700	-10.950	4019.760	-3.350	-3.300
82.	6813.692	4.690	8.760	4502.545	-7.820	-11.210	4015.206	-3.430	-3.350
83.	6822.914	4.170	8.870	4492.406	-6.900	-11.350	4010.902	-3.400	-3.310
84.	6831.041	3.630	8.960	4483.568	-5.940	-11.540	4006.933	-3.300	-3.250
85.	6838.015	3.060	9.040	4476.115	-4.970	-11.660	4003.392	-3.150	-3.100
86.	6843.786	2.470	9.100	4469.997	-3.990	-11.760	4000.365	-2.950	-2.900
87.	6848.315	1.870	9.150	4465.240	-2.990	-11.840	3997.926	-2.740	-2.690
88.	6851.572	1.250	9.190	4461.844	-2.000	-11.690	3995.137	-2.500	-2.450
89.	6853.535	0.630	9.210	4459.407	-1.000	-11.420	3992.045	-2.200	-2.150
90.	6854.190	-0.000	9.210	4459.129	0.000	-11.930	3994.677	0.000	0.000
91.	6853.535	-630	9.210	4459.807	1.000	-11.520	3995.045	0.620	0.630
92.	6851.572	-1.250	9.190	4461.844	2.000	-11.690	3996.137	1.190	0.800
93.	6848.315	-2.470	9.150	4465.240	2.990	-11.840	3997.926	1.740	0.700
94.	6843.786	-3.060	9.100	4469.997	3.990	-11.760	4000.365	2.250	0.610
95.	6838.015	-3.630	9.040	4476.115	4.970	-11.660	4003.392	2.700	0.500
96.	6831.041	-4.170	8.960	4483.568	5.940	-11.540	4006.933	3.040	0.400
97.	6822.914	-4.690	8.870	4492.406	6.900	-11.390	4010.902	3.400	0.310
98.	6813.692	-5.170	8.760	4502.545	7.820	-11.210	4015.206	3.630	0.250
99.	6803.441		8.630	4513.966	8.700	-10.990	4019.760	3.750	0.190

Z-PLANE (XY-PLANE) LITHIUM NIOBATE (WARNER ET AL)

BULK

	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
100.	-5.610	8.490	4826.624	9.520	-10.750	4024.466	3.670	2.740
101.	-6.010	8.320	4840.441	10.260	-10.460	4029.239	3.690	2.500
102.	-6.360	8.130	4855.324	10.990	-10.180	4034.000	3.690	2.200
103.	-6.660	7.920	4871.157	11.520	-9.850	4038.676	3.750	1.900
104.	-6.900	7.690	4887.802	11.990	-9.460	4043.213	3.610	1.600
105.	-7.060	7.430	4905.097	12.320	-9.090	4047.557	3.430	1.410
106.	-7.180	7.150	4922.860	12.530	-8.670	4051.671	3.230	1.110
107.	-7.210	6.840	4940.888	12.590	-8.220	4055.526	3.010	0.800
108.	-7.160	6.490	4958.964	12.500	-7.740	4059.102	2.770	0.490
109.	-7.030	6.120	4976.856	12.250	-7.240	4062.387	2.530	0.190
110.	-6.800	5.710	4994.323	11.840	-6.700	4065.372	2.290	0.000
111.	-6.490	5.270	5011.117	11.260	-6.140	4068.056	2.040	0.000
112.	-6.070	4.790	5026.990	10.530	-5.550	4070.440	1.800	0.000
113.	-5.570	4.280	5041.697	9.630	-4.930	4072.526	1.560	0.000
114.	-4.960	3.740	5055.002	8.590	-4.290	4074.320	1.330	0.000
115.	-4.300	3.170	5066.684	7.400	-3.620	4075.826	1.100	0.000
116.	-3.540	2.570	5076.543	6.060	-2.920	4077.050	0.870	0.000
117.	-2.720	1.950	5084.404	4.660	-2.210	4077.996	0.650	0.000
118.	-1.640	1.310	5090.125	3.160	-1.460	4078.669	0.430	0.000
119.	-0.930	0.660	5093.601	1.590	-0.740	4079.071	0.220	0.000
120.	0.000	0.000	5094.767	-0.000	0.000	4079.205	-0.600	-0.000
121.	0.930	-0.660	5093.601	-1.590	0.740	4079.071	-0.220	-0.000
122.	1.640	-1.310	5090.125	-3.160	1.460	4078.669	-0.430	-0.000
123.	2.720	-1.950	5084.404	-4.660	2.210	4077.996	-0.650	-0.000
124.	3.540	-2.570	5076.543	-6.060	2.920	4077.050	-0.870	-0.000
125.	4.300	-3.170	5066.684	-7.400	3.620	4075.826	-1.100	-0.000
126.	4.960	-3.740	5055.002	-8.590	4.290	4074.320	-1.330	-0.000
127.	5.570	-4.280	5041.697	-9.630	4.930	4072.526	-1.560	-0.000
128.	6.070	-4.790	5026.990	-10.530	5.550	4070.440	-1.800	-0.000
129.	6.490	-5.270	5011.117	-11.260	6.140	4068.056	-2.040	-0.000
130.	6.800	-5.710	5000.125	-11.640	6.700	4065.372	-2.290	-0.000
131.	7.030	-6.120	4976.856	-12.250	7.240	4062.387	-2.530	-0.000
132.	7.160	-6.490	4958.964	-12.500	7.740	4059.102	-2.770	-0.000
133.	7.210	-6.840	4940.888	-12.590	8.220	4055.526	-3.010	-0.000
134.	7.160	-7.150	4922.860	-12.530	8.670	4051.671	-3.230	-0.000
135.	7.030	-7.430	4905.097	-12.320	9.090	4047.557	-3.430	-0.000
136.	6.900	-7.690	4887.802	-11.990	9.460	4043.213	-3.610	-0.000
137.	6.660	-7.920	4871.157	-11.520	9.850	4038.676	-3.750	-0.000
138.	6.360	-8.130	4855.324	-10.990	10.180	4034.000	-3.840	-0.000
139.	6.010	-8.320	4840.441	-10.260	10.460	4029.239	-3.690	-0.000
140.	5.610	-8.490	4826.624	-9.520	10.750	4024.466	-3.670	-0.000
141.	5.170	-8.670	4813.968	-8.700	10.990	4019.700	-3.790	-0.000
142.	4.690	-8.760	4802.545	-7.820	11.210	4015.206	-3.630	-0.000
143.	4.170	-8.670	4792.406	-6.900	11.390	4010.902	-3.400	-0.000
144.	3.630	-8.960	4783.588	-5.940	11.540	4006.933	-3.090	-0.000
145.	3.060	-9.040	4776.115	-4.970	11.660	4003.392	-2.700	-0.000
146.	2.470	-9.100	4769.997	-3.990	11.760	4000.365	-2.250	-0.000
147.	1.870	-9.150	4765.240	-2.990	11.840	3997.926	-1.740	-0.000
148.	1.250	-9.190	4761.844	-2.000	11.650	3996.137	-1.190	-0.000
149.	0.630	-9.210	4759.607	-1.000	11.520	3995.045	-0.620	-0.000

Z-PLANE (XY-PLANE) LITHIUM NIOBATE (WARNER ET AL)

BULK

	LNQVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
150.	6054.190	-0.000	-9.210	4459.125	0.000	11.530	3934.677	0.000	-6.840
151.	6053.535	-6.630	-9.210	4459.807	1.000	11.520	3925.045	0.000	-6.030
152.	6051.572	-1.250	-9.190	4461.844	2.000	11.690	3946.137	1.140	-8.000
153.	6048.315	-1.670	-9.150	4465.240	2.950	11.640	3947.926	1.740	-8.750
154.	6043.786	-2.470	-9.100	4469.997	3.590	11.760	4000.365	2.250	-8.670
155.	6038.015	-3.060	-9.040	4476.115	4.970	11.660	4003.392	2.700	-8.500
156.	6031.041	-3.630	-8.960	4483.566	5.940	11.540	4006.933	3.050	-8.450
157.	6022.914	-4.170	-8.870	4492.406	6.900	11.350	4010.902	3.400	-8.310
158.	6013.692	-4.690	-8.760	4502.545	7.620	11.210	4015.206	3.630	-8.150
159.	6003.641	-5.170	-8.630	4513.968	8.700	10.990	4019.760	3.790	-7.950
160.	6792.241	-5.610	-8.490	4526.624	9.520	10.750	4024.466	3.870	-7.740
161.	6780.175	-6.010	-8.320	4540.441	10.260	10.480	4029.239	3.890	-7.500
162.	6767.353	-6.360	-8.130	4555.324	10.950	10.160	4034.000	3.840	-7.250
163.	6753.873	-6.660	-7.920	4571.157	11.520	9.850	4038.678	3.750	-6.980
164.	6739.859	-6.900	-7.690	4587.802	11.990	9.460	4043.213	3.610	-6.700
165.	6725.641	-7.060	-7.430	4605.097	12.320	9.050	4047.557	3.430	-6.410
166.	6710.762	-7.180	-7.150	4622.860	12.530	8.670	4051.671	3.230	-6.110
167.	6695.974	-7.210	-6.840	4640.886	12.590	8.220	4055.526	3.010	-5.750
168.	6681.238	-7.160	-6.490	4658.964	12.500	7.740	4059.152	2.770	-5.450
169.	6666.725	-7.030	-6.120	4676.856	12.250	7.240	4062.367	2.530	-5.150
170.	6652.615	-6.800	-5.710	4694.323	11.640	6.700	4065.322	2.240	-4.800
171.	6639.066	-6.490	-5.270	4711.117	11.260	6.140	4068.056	2.040	-4.500
172.	6626.333	-6.070	-4.790	4726.990	10.930	5.550	4070.440	1.800	-4.200
173.	6614.533	-5.570	-4.280	4741.697	9.630	4.930	4072.526	1.560	-3.900
174.	6603.866	-4.980	-3.740	4755.002	8.590	4.250	4074.320	1.330	-3.600
175.	6594.510	-4.300	-3.170	4766.684	7.400	3.620	4075.626	1.100	-3.300
176.	6586.615	-3.540	-2.570	4776.543	6.080	2.920	4077.050	.870	-3.000
177.	6580.321	-2.720	-1.950	4784.404	4.660	2.210	4077.996	.650	-2.700
178.	6575.740	-1.840	-1.310	4790.125	3.160	1.420	4078.669	.430	-2.400
179.	6572.957	-.930	-.660	4793.601	1.590	.740	4079.071	.220	-2.100
180.	6572.023	0.000	-0.000	4794.767	-0.000	-0.000	4079.205	-0.000	-0.000

X-PLANE (YZ-PLANE) LITHIUM NIOBATE (KOROLYUK ET AL)

	LNGVEL	LPHI12	LPHI13	FSPVEL	FSPHI12	FSPHI13	SSPVEL	SSPHI12	SSPHI13
0.	5838.704	10.309	0.000	4410.045	-12.279	-0.000	3938.755	5.859	-0.000
1.	5868.703	10.550	0.000	4393.045	-12.730	-0.000	3945.700	5.579	-0.000
2.	5883.251	10.740	0.000	4374.475	-13.129	-0.000	3952.024	5.489	-0.000
3.	5906.227	10.870	0.000	4357.500	-13.419	-0.000	3958.529	5.380	-0.000
4.	5929.516	10.959	0.000	4339.241	-13.639	-0.000	3964.782	5.079	-0.000
5.	5953.007	10.989	0.000	4320.415	-13.769	-0.000	3970.803	4.659	-0.000
6.	5976.592	10.971	0.000	4302.337	-13.829	-0.000	3976.577	4.659	-0.000
7.	6000.168	10.910	0.000	4283.914	-13.800	-0.000	3982.099	4.660	-0.000
8.	6023.660	10.800	0.000	4265.450	-13.700	-0.000	3987.757	4.220	-0.000
9.	6045.914	10.660	0.000	4247.542	-13.569	-0.000	3992.357	3.999	-0.000
10.	6069.994	10.489	0.000	4229.941	-13.409	-0.000	3997.885	3.779	-0.000
11.	6092.529	10.260	0.000	4212.754	-13.019	-0.000	4001.539	3.549	-0.000
12.	6116.712	10.021	0.000	4196.077	-12.659	-0.000	4005.714	3.309	-0.000
13.	6136.381	9.750	0.000	4179.905	-12.239	-0.000	4009.507	3.079	-0.000
14.	6157.472	9.449	0.000	4164.222	-11.779	-0.000	4013.213	2.839	-0.000
15.	6177.921	9.129	0.000	4149.647	-11.269	-0.000	4016.524	2.599	-0.000
16.	6197.678	8.779	0.000	4135.631	-10.699	-0.000	4019.559	2.359	-0.000
17.	6216.686	8.419	0.000	4122.471	-10.089	-0.000	4022.274	2.109	-0.000
18.	6234.900	8.029	0.000	4110.052	-9.459	-0.000	4024.701	1.859	-0.000
19.	6252.278	7.639	0.000	4098.556	-8.749	-0.000	4026.425	1.619	-0.000
20.	6268.742	7.219	0.000	4087.956	-8.000	-0.000	4028.585	1.359	-0.000
21.	6284.391	6.799	0.000	4078.257	-7.399	-0.000	4030.159	1.119	-0.000
22.	6299.046	6.369	0.000	4069.499	-6.679	-0.000	4031.767	859	-0.000
23.	6312.752	5.919	0.000	4061.552	-5.959	-0.000	4032.264	519	-0.000
24.	6325.481	5.479	0.000	4054.721	-5.239	-0.000	4032.955	759	-0.000
25.	6337.217	5.019	0.000	4048.594	-4.529	-0.000	4033.134	199	-0.000
26.	6347.958	4.569	0.000	4043.549	-3.829	-0.000	4033.104	159	-0.000
27.	6357.673	4.119	0.000	4039.251	-3.149	-0.000	4032.763	699	-0.000
28.	6366.385	3.659	0.000	4035.795	-2.499	-0.000	4032.113	699	-0.000
29.	6374.087	3.209	0.000	4033.112	-1.869	-0.000	4031.153	919	-0.000
30.	6380.786	2.769	0.000	4031.155	-1.309	-0.000	4029.845	1159	-0.000
31.	6386.494	2.329	0.000	4029.999	-0.779	-0.000	4029.419	1419	-0.000
32.	6391.225	1.899	0.000	4029.260	-0.289	-0.000	4028.479	1669	-0.000
33.	6395.000	1.479	0.000	4029.191	149	-0.000	4028.044	1909	-0.000
34.	6397.842	1.060	0.000	4029.597	529	-0.000	4021.761	2159	-0.000
35.	6399.780	.660	0.000	4030.470	829	0.000	4019.977	2409	0.000
36.	6400.866	.280	0.000	4031.597	1.070	0.000	4015.897	2649	0.000
37.	6401.077	-.080	0.000	4033.009	1.240	0.000	4012.524	2899	0.000
38.	6400.514	-.429	0.000	4036.681	1.340	0.000	4008.861	3139	0.000
39.	6399.281	-.740	0.000	4036.274	1.370	0.000	4004.412	3359	0.000
40.	6397.186	-1.040	0.000	4037.937	1.320	0.000	4000.661	3549	0.000
41.	6394.522	-1.320	0.000	4039.497	1.200	0.000	3996.173	3810	0.000
42.	6391.264	-1.570	0.000	4040.860	1.000	0.000	3991.391	4049	0.000
43.	6387.469	-1.800	0.000	4041.932	.739	0.000	3986.141	4269	0.000
44.	6383.199	-2.199	0.000	4042.520	.389	0.000	3981.029	4489	0.000
45.	6378.515	-2.510	0.000	4042.531	-.059	0.000	3975.557	4699	0.000
46.	6373.484	-2.810	0.000	4042.476	-.549	0.000	3969.834	4919	0.000
47.	6368.171	-3.020	0.000	4041.466	-1.110	0.000	3963.464	5110	0.000
48.	6362.642	-3.250	0.000	4039.720	-1.740	0.000	3957.254	5320	0.000
49.	6356.964	-3.560	0.000	4037.150	-2.430	0.000	3950.714	5510	0.000

X-PLANE (V7-PLANE) LITHIUM NIOBATE (KOROLYUK ET AL)

	LMGVEL	LPHI12	LPHI13	FSRWEL	FSPHI12	FSPHI13	SSRWEL	SSPHI12	SSPHI13
50.	7351.203	-2.580	0.000	4033.715	-3.180	0.000	394.445	-5.710	0.000
51.	7365.424	-2.589	0.000	4029.319	-3.989	0.000	3936.944	-5.400	7.400
52.	7339.590	-2.549	0.000	4023.916	-4.929	0.000	3929.754	-6.049	0.000
53.	7334.061	-2.499	-0.000	4017.460	-5.700	0.000	3922.354	-6.259	0.000
54.	7328.593	-2.400	-0.000	4009.914	-6.600	0.000	3914.754	-6.499	0.000
55.	7323.141	-2.300	-0.000	4001.252	-7.530	0.000	3906.965	-6.590	0.000
56.	7318.352	-2.170	-0.000	3991.459	-8.469	0.000	3898.967	-6.749	0.000
57.	7313.570	-2.030	-0.000	3980.516	-9.390	0.000	3891.857	-6.990	0.000
58.	7309.332	-1.970	-0.000	3968.494	-10.310	0.000	3884.554	-7.050	0.000
59.	7305.371	-1.690	-0.000	3955.159	-11.200	0.000	3876.109	-7.190	0.000
60.	7301.911	-1.510	-0.000	3941.170	-12.050	0.000	3865.591	-7.320	0.000
61.	7298.673	-1.310	-0.000	3925.944	-12.849	0.000	3856.764	-7.450	0.000
62.	7295.968	-1.120	-0.000	3909.467	-13.640	0.000	3847.417	-7.560	0.000
63.	7293.702	-0.920	-0.000	3892.902	-14.330	0.000	3838.437	-7.670	0.000
64.	7291.877	-0.720	-0.000	3875.145	-15.020	0.000	3828.869	-7.770	0.000
65.	7290.485	-0.530	-0.000	3856.825	-15.640	0.000	3818.683	-7.870	0.000
66.	7289.514	-0.340	-0.000	3837.942	-16.259	0.000	3807.104	-7.950	0.000
67.	7288.943	-0.170	-0.000	3818.668	-16.870	0.000	3794.216	-8.030	0.000
68.	7288.756	0.000	-0.000	3799.145	-17.470	0.000	3779.716	-8.100	0.000
69.	7288.940	-0.150	-0.000	3779.275	-18.070	-0.000	3763.520	-8.160	0.000
70.	7289.442	-0.290	-0.000	3759.451	-18.640	-0.000	3745.794	-8.200	0.000
71.	7290.234	-0.420	-0.000	3740.598	-19.140	-0.000	3726.245	-8.240	0.000
72.	7291.294	-0.530	-0.000	3721.623	-19.600	-0.000	3704.760	-8.270	0.000
73.	7292.573	-0.620	-0.000	3701.192	-20.000	-0.000	3681.224	-8.300	0.000
74.	7294.037	-0.690	-0.000	3680.468	-20.350	-0.000	3655.702	-8.310	0.000
75.	7295.644	-0.750	-0.000	3658.608	-20.640	-0.000	3628.194	-8.320	0.000
76.	7297.367	-0.790	-0.000	3635.767	-20.880	-0.000	3607.715	-8.330	0.000
77.	7299.196	-0.820	-0.000	3612.714	-21.080	-0.000	3584.284	-8.340	0.000
78.	7300.979	-0.820	-0.000	3589.091	-21.240	-0.000	3557.894	-8.350	0.000
79.	7302.400	-0.810	-0.000	3564.336	-21.360	-0.000	3529.412	-8.350	0.000
80.	7304.565	-0.790	-0.000	3538.539	-21.440	-0.000	3500.844	-8.350	0.000
81.	7306.102	-0.750	-0.000	3511.442	-21.480	-0.000	3471.173	-8.350	0.000
82.	7307.921	-0.700	-0.000	3483.105	-21.480	-0.000	3440.424	-8.350	0.000
83.	7309.417	-0.640	-0.000	3453.105	-21.440	-0.000	3408.584	-8.350	0.000
84.	7310.765	-0.570	-0.000	3421.564	-21.360	-0.000	3375.644	-8.350	0.000
85.	7311.943	-0.490	-0.000	3388.440	-21.240	-0.000	3341.604	-8.350	0.000
86.	7312.934	-0.400	-0.000	3353.930	-21.080	-0.000	3306.564	-8.350	0.000
87.	7313.723	-0.310	-0.000	3318.113	-20.880	-0.000	3270.524	-8.350	0.000
88.	7314.295	-0.210	-0.000	3281.450	-20.640	-0.000	3233.484	-8.350	0.000
89.	7314.644	-0.100	-0.000	3243.781	-20.350	-0.000	3195.444	-8.350	0.000
90.	7314.761	-0.000	-0.000	3205.105	-20.000	-0.000	3156.404	-8.350	0.000
91.	7314.641	-0.110	-0.000	3165.420	-19.600	-0.000	3115.364	-8.350	0.000
92.	7314.298	-0.210	-0.000	3124.104	-19.140	-0.000	3073.324	-8.350	0.000
93.	7313.697	-0.310	-0.000	3081.307	-18.640	-0.000	3029.284	-8.350	0.000
94.	7312.872	-0.420	-0.000	3037.047	-18.070	-0.000	2983.244	-8.350	0.000
95.	7311.817	-0.520	-0.000	2991.109	-17.470	-0.000	2935.204	-8.350	0.000
96.	7310.538	-0.620	-0.000	2943.434	-16.870	-0.000	2885.164	-8.350	0.000
97.	7309.043	-0.720	-0.000	2894.517	-16.259	-0.000	2833.124	-8.350	0.000
98.	7307.337	-0.810	-0.000	2844.214	-15.640	-0.000	2779.084	-8.350	0.000
99.	7305.429	-0.900	-0.000	2792.381	-15.020	-0.000	2723.044	-8.350	0.000

X-PLANE (YZ-PLANE) LITHIUM NITRATE (KOPOLYX ET AL)

	LNCVFL	LPHI12	LPHI13	FSRVFL	FSPHI12	FSPHI13	SSRVFL	SSPHI12	SSPHI13
100.	7103.327	-0.999	-0.010	3726.875	14.330	0.000	7529.297	-4.439	0.000
101.	7301.036	-1.071	-0.010	3743.562	14.370	0.000	7523.241	-4.568	0.000
102.	7298.567	-1.150	-0.010	3760.311	14.310	0.000	7519.492	-4.240	0.000
103.	7295.921	-1.230	-0.010	3777.000	14.151	0.000	7514.955	-3.990	0.000
104.	7293.164	-1.310	-0.010	3793.515	13.910	0.000	7509.976	-3.700	0.000
105.	7290.118	-1.390	-0.010	3809.754	13.590	0.000	7504.147	-3.400	0.000
106.	7286.953	-1.460	-0.010	3825.674	13.200	0.000	7502.677	-3.090	0.000
107.	7283.637	-1.540	-0.010	3841.045	12.750	0.000	7499.547	-2.790	0.000
108.	7280.137	-1.620	-0.010	3855.951	12.260	0.000	7496.757	-2.460	0.000
109.	7276.455	-1.700	-0.010	3870.244	11.740	0.000	7494.311	-2.130	0.000
110.	7272.586	-1.780	-0.010	3884.004	11.180	0.000	7492.217	-1.810	0.000
111.	7268.515	-1.860	-0.010	3897.179	10.510	0.000	7490.465	-1.490	0.000
112.	7264.229	-1.940	-0.010	3909.492	9.760	0.000	7489.071	-1.160	0.000
113.	7259.714	-2.100	-0.010	3921.278	8.910	0.000	7488.037	-0.810	0.000
114.	7254.951	-2.210	-0.010	3932.324	8.010	0.000	7487.350	-0.470	0.000
115.	7249.921	-2.340	-0.010	3942.766	7.070	0.000	7487.027	-0.140	0.000
116.	7244.603	-2.480	-0.010	3952.592	6.070	0.000	7487.063	-0.200	0.000
117.	7238.974	-2.620	-0.010	3961.819	5.000	0.000	7487.457	-0.540	0.000
118.	7233.017	-2.780	-0.010	3970.577	3.860	0.000	7488.280	-0.890	0.000
119.	7226.695	-2.950	-0.010	3978.736	2.580	0.000	7489.314	-1.210	0.000
120.	7219.996	-3.130	-0.010	3986.594	1.250	0.000	7490.742	-1.560	0.000
121.	7212.993	-3.320	-0.010	3994.057	5.080	0.000	7492.599	-1.870	0.000
122.	7205.764	-3.520	-0.010	4001.231	5.770	-0.000	7494.767	-2.200	0.000
123.	7197.316	-3.740	-0.010	4008.192	5.630	-0.000	7497.281	-2.520	0.000
124.	7188.918	-3.960	-0.010	4015.018	5.330	-0.000	7500.133	-2.840	0.000
125.	7180.003	-4.190	-0.010	4021.746	5.000	-0.000	7503.335	-3.150	0.000
126.	7170.562	-4.430	-0.010	4028.574	5.540	-0.000	7506.865	-3.450	0.000
127.	7160.602	-4.680	-0.010	4035.457	5.640	-0.000	7510.724	-3.750	0.000
128.	7150.110	-4.930	-0.010	4042.512	5.800	-0.000	7514.905	-4.050	0.000
129.	7139.077	-5.180	-0.010	4049.812	6.010	-0.000	7519.405	-4.370	0.000
130.	7127.494	-5.440	-0.010	4057.426	6.280	-0.000	7524.214	-4.610	0.000
131.	7115.369	-5.700	-0.010	4065.419	6.500	-0.000	7529.325	-4.880	0.000
132.	7102.692	-5.960	-0.010	4073.452	6.690	-0.000	7534.712	-5.140	0.000
133.	7089.471	-6.220	-0.010	4082.774	7.150	-0.000	7540.425	-5.390	0.000
134.	7075.715	-6.480	-0.010	4092.246	7.780	-0.000	7546.401	-5.660	0.000
135.	7061.419	-6.730	-0.010	4102.297	8.230	-0.000	7552.644	-5.870	0.000
136.	7046.657	-6.970	-0.010	4112.964	8.700	-0.000	7559.143	-6.090	0.000
137.	7031.393	-7.200	-0.010	4124.272	9.180	-0.000	7565.905	-6.310	0.000
138.	7015.671	-7.420	-0.010	4136.238	9.670	-0.000	7572.905	-6.510	0.000
139.	6999.524	-7.620	-0.010	4148.871	10.150	-0.000	7580.139	-6.700	0.000
140.	6982.987	-7.810	-0.010	4162.168	10.620	-0.000	7587.584	-6.890	0.000
141.	6966.102	-7.980	-0.010	4176.121	11.080	-0.000	7595.269	-7.060	0.000
142.	6948.914	-8.130	-0.010	4190.707	11.510	-0.000	7603.129	-7.220	0.000
143.	6931.475	-8.250	-0.010	4205.958	11.910	-0.000	7611.147	-7.370	0.000
144.	6913.843	-8.350	-0.010	4221.853	12.270	-0.000	7619.425	-7.510	0.000
145.	6896.078	-8.420	-0.010	4237.924	12.580	-0.000	7627.830	-7.630	0.000
146.	6878.250	-8.450	-0.010	4254.650	12.850	-0.000	7636.391	-7.750	0.000
147.	6860.432	-8.450	-0.010	4271.764	13.050	-0.000	7645.101	-7.850	0.000
148.	6842.704	-8.410	-0.010	4289.187	13.190	-0.000	7653.942	-7.950	0.000
149.	6825.150	-8.330	-0.010	4306.832	13.270	-0.000	7662.905	-8.030	0.000

X-PLANE (YZ-PLANE) LITHIUM NIORATE (KOPOLYMER ET AL)

	LNGVEL	LOHI12	LOHI13	FSRVEL	FSPH12	FSPH13	CSPVEL	CSPH12	CSPH13
154.	5807.860	-9.200	0.010	4424.693	13.279	0.000	1671.970	9.100	0.000
151.	5798.931	-9.879	0.010	4424.795	13.199	0.000	1681.151	9.150	0.000
152.	5776.463	-7.803	0.030	4424.899	13.049	0.000	1690.611	9.210	0.000
153.	5758.561	-7.531	0.030	4372.534	12.790	0.000	1699.742	9.250	0.000
154.	5743.334	-7.190	0.030	4394.756	12.460	0.000	1709.134	9.280	0.000
155.	5728.195	-6.801	0.030	4411.456	12.049	0.000	1718.586	9.300	0.000
156.	5715.356	-5.350	0.030	4427.552	11.579	0.000	1728.071	9.310	0.000
157.	5702.833	-5.850	0.030	4442.939	10.920	0.000	1737.587	9.300	0.000
158.	5691.640	-5.280	0.030	4457.452	10.230	0.000	1747.117	9.290	0.000
159.	5681.290	-4.650	0.030	4470.959	9.440	0.000	1756.664	9.270	0.000
160.	5672.489	-3.970	0.030	4483.161	8.570	0.000	1766.166	9.240	0.000
161.	5665.140	-3.240	0.030	4494.595	7.610	0.000	1775.679	9.200	0.000
162.	5658.135	-2.470	0.030	4504.298	6.580	0.000	1785.164	9.140	0.000
163.	5652.678	-1.650	0.030	4512.504	5.480	0.000	1794.575	9.070	0.000
164.	5651.952	-0.790	0.030	4519.159	4.320	0.000	1803.954	8.990	0.000
165.	5651.019	0.000	0.030	4524.502	3.120	0.000	1813.264	8.900	0.000
166.	5653.019	0.770	0.030	4527.969	1.880	0.000	1822.507	8.800	0.000
167.	5655.902	1.870	0.030	4529.671	0.620	0.000	1831.661	8.700	0.000
168.	5658.604	2.760	0.030	4529.647	-0.650	0.000	1840.714	8.600	0.000
169.	5667.117	3.540	0.030	4527.377	-1.910	0.000	1849.669	8.500	0.000
170.	5675.402	4.400	0.030	4524.182	-3.150	0.000	1858.587	8.400	0.000
171.	5685.414	5.310	0.030	4519.198	-4.360	0.000	1867.211	8.300	0.000
172.	5697.089	6.090	0.030	4512.331	-5.520	0.000	1875.787	8.200	0.000
173.	5710.345	6.870	0.030	4504.004	-6.630	0.000	1884.292	8.100	0.000
174.	5725.092	7.500	0.030	4494.159	-7.670	0.000	1892.874	8.000	0.000
175.	5741.229	8.120	0.030	4482.819	-8.640	0.000	1900.585	7.900	0.000
176.	5758.543	8.680	0.030	4470.819	-9.530	0.000	1908.319	7.800	0.000
177.	5777.220	9.180	0.030	4458.761	-10.340	0.000	1916.277	7.700	0.000
178.	5796.838	9.620	0.030	4446.079	-11.070	0.000	1924.832	7.600	0.000
179.	5817.374	9.990	0.030	4433.469	-11.710	0.000	1933.104	7.500	0.000
180.	5838.704	10.300	0.030	4420.045	-12.270	0.000	1941.355	7.400	0.000

Y-PLANE (XZ-PLANE) LITHIUM NIOBATE (KOROLYUK ET AL)

	LNUCEL	LPHI12	LPHI13	FSRWEL	FSPH12	FSPH13	SSRWEL	SSPH12	SSPH13
0.	6555.816	0.000	0.000	4760.940	0.000	0.000	4010.295	0.000	0.000
1.	6556.710	0.090	1.740	4759.956	-1.104	-1.740	4010.160	-0.224	-1.740
2.	6559.182	1.740	1.470	4757.135	-2.594	-1.570	4009.757	-0.444	-1.570
3.	6563.982	2.540	2.190	4752.467	-3.459	-2.330	4009.074	-0.669	-2.330
4.	6569.926	3.470	2.440	4745.998	-5.070	-3.460	4008.131	-0.891	-3.460
5.	6577.688	4.240	3.550	4737.795	-6.244	-4.740	4006.924	-1.090	-4.740
6.	6587.012	5.010	4.130	4727.915	-7.160	-5.430	4005.467	-1.308	-5.430
7.	6597.805	5.700	4.740	4716.515	-8.414	-6.050	4003.756	-1.540	-6.050
8.	6609.969	5.340	5.340	4703.614	-9.340	-6.620	4001.802	-1.740	-6.620
9.	6623.194	5.910	5.950	4689.404	-10.240	-7.140	3999.517	-1.930	-7.140
10.	6637.967	7.430	6.730	4673.942	-11.120	-7.600	3997.204	-2.070	-7.600
11.	6653.572	7.840	6.750	4657.165	-11.000	-7.010	3994.590	-2.230	-7.010
12.	6670.098	8.240	7.150	4639.795	-12.550	-7.360	3991.771	-2.390	-7.360
13.	6687.404	8.610	7.490	4621.350	-13.150	-7.660	3988.771	-2.540	-7.660
14.	6705.398	9.390	7.470	4602.147	-13.570	-7.900	3985.594	-2.640	-7.900
15.	6723.981	9.110	8.050	4582.301	-14.130	-8.090	3982.274	-2.800	-8.090
16.	6742.981	9.270	8.730	4561.970	-14.510	-8.230	3978.904	-2.910	-8.230
17.	6762.360	9.390	8.430	4541.104	-14.840	-8.320	3975.221	-3.000	-8.320
18.	6781.993	9.460	8.510	4519.954	-15.100	-8.360	3971.514	-3.090	-8.360
19.	6801.789	9.490	8.750	4498.531	-15.100	-8.360	3967.764	-3.150	-8.360
20.	6821.659	9.480	8.950	4477.045	-15.440	-8.320	3963.917	-3.200	-8.320
21.	6841.521	9.430	9.100	4455.477	-15.540	-8.230	3959.917	-3.240	-8.230
22.	6861.294	9.350	9.350	4433.911	-15.580	-8.110	3955.895	-3.240	-8.110
23.	6880.918	9.230	9.950	4412.246	-15.580	-7.960	3951.814	-3.240	-7.960
24.	6900.315	9.090	9.940	4390.692	-15.460	-7.780	3947.694	-3.240	-7.780
25.	6919.429	8.920	8.910	4369.692	-15.460	-7.500	3943.425	-3.240	-7.500
26.	6938.204	8.730	8.740	4348.715	-15.140	-7.350	3939.024	-3.320	-7.350
27.	6956.590	8.510	8.740	4328.079	-15.140	-7.110	3934.575	-3.320	-7.110
28.	6974.542	8.280	8.590	4307.771	-14.980	-6.850	3930.084	-3.220	-6.850
29.	6992.018	8.130	8.540	4287.556	-14.760	-6.540	3925.647	-3.210	-6.540
30.	7009.983	7.770	8.650	4268.774	-14.440	-6.320	3921.061	-3.200	-6.320
31.	7025.405	7.500	8.320	4249.341	-14.140	-6.050	3917.174	-3.210	-6.050
32.	7041.257	7.220	8.170	4230.949	-13.840	-5.780	3913.200	-3.240	-5.780
33.	7056.515	6.920	8.010	4213.004	-13.460	-5.520	3909.240	-3.290	-5.520
34.	7071.162	6.530	7.830	4195.713	-13.050	-5.260	3905.301	-3.310	-5.260
35.	7085.182	6.320	7.650	4178.032	-12.540	-5.020	3901.201	-3.310	-5.020
36.	7098.564	6.020	7.450	4160.995	-12.080	-4.790	3897.925	-3.640	-4.790
37.	7111.302	5.710	7.250	4147.995	-11.530	-4.580	3894.415	-3.910	-4.580
38.	7123.391	5.410	7.030	4133.677	-10.940	-4.370	3891.804	-4.190	-4.370
39.	7134.833	5.100	6.820	4120.131	-10.300	-4.180	3889.439	-4.510	-4.180
40.	7145.630	4.800	6.590	4107.517	-9.530	-3.990	3887.044	-4.920	-3.990
41.	7155.798	4.510	6.350	4095.823	-8.930	-3.800	3884.962	-5.360	-3.800
42.	7165.324	4.220	6.120	4085.062	-8.220	-3.610	3883.145	-5.830	-3.610
43.	7174.244	3.940	5.910	4075.229	-7.510	-3.410	3881.464	-6.330	-3.410
44.	7182.568	3.670	5.640	4066.294	-6.840	-3.200	3879.967	-6.810	-3.200
45.	7190.315	3.400	5.340	4058.206	-6.190	-2.980	3878.597	-7.320	-2.980
46.	7197.506	3.150	5.140	4050.040	-5.620	-2.750	3877.347	-7.740	-2.750
47.	7204.167	2.920	4.930	4041.654	-5.130	-2.520	3876.584	-8.200	-2.520
48.	7210.324	2.690	4.640	4033.144	-4.720	-2.290	3876.574	-8.570	-2.290
49.	7216.086	2.460	4.430	4024.568	-4.410	-2.070	3876.524	-8.840	-2.070

Y-PLANE (XZ-PLANE) LITHIUM NIORATE (KOROLYUK ET AL)

	LNGVEL	LW112	LW111	FSPVEL	FSP112	FSP111	SSRVEL	SSP112	SSP111
50.	7221.243	2.200	4.150	4027.242	-4.200	-1.470	3795.984	-9.150	15.180
51.	7225.867	2.100	3.980	4022.206	-4.080	-1.700	3745.205	-9.860	15.540
52.	7230.511	1.940	3.650	4017.220	-4.050	-1.550	3774.247	-9.510	15.750
53.	7235.608	1.790	3.020	4012.213	-4.130	-1.430	3763.163	-9.610	15.920
54.	7239.393	1.650	3.190	4007.080	-4.280	-1.350	3752.025	-9.660	16.160
55.	7241.901	1.530	2.960	4001.724	-4.500	-1.300	3740.845	-9.670	16.200
56.	7245.165	1.430	2.740	3996.057	-4.790	-1.300	3729.784	-9.640	16.310
57.	7248.219	1.340	2.530	3990.802	-5.150	-1.330	3718.775	-9.580	16.420
58.	7251.093	1.270	2.320	3985.490	-5.550	-1.400	3707.894	-9.480	16.500
59.	7253.820	1.210	2.120	3979.462	-6.010	-1.510	3697.174	-9.350	16.560
60.	7256.429	1.160	1.910	3966.869	-6.500	-1.550	3686.557	-9.190	16.600
61.	7258.947	1.120	1.750	3956.672	-7.020	-1.630	3676.367	-9.080	16.620
62.	7261.394	1.100	1.540	3951.943	-7.560	-1.640	3666.337	-8.790	16.610
63.	7263.803	1.080	1.420	3942.363	-8.110	-1.670	3656.594	-8.550	16.570
64.	7266.182	1.070	1.270	3932.274	-8.670	-1.700	3647.165	-8.240	16.540
65.	7268.551	1.070	1.110	3921.427	-9.230	-1.820	3638.075	-7.990	16.480
66.	7270.921	1.070	1.010	3909.994	-9.780	-1.900	3629.357	-7.670	16.270
67.	7273.303	1.080	.980	3897.914	-10.100	-1.930	3621.017	-7.330	16.090
68.	7275.702	1.090	.770	3885.259	-10.410	-1.950	3613.045	-6.970	15.940
69.	7278.120	1.100	.570	3872.067	-11.270	-1.970	3605.614	-6.540	15.720
70.	7280.557	1.100	.500	3858.334	-11.700	-1.980	3598.594	-6.150	15.520
71.	7283.009	1.110	.500	3844.175	-12.080	-1.980	3592.061	-5.720	15.270
72.	7285.470	1.110	.430	3829.636	-12.410	-1.960	3586.044	-5.250	14.970
73.	7287.930	1.110	.350	3814.744	-12.680	-1.930	3580.555	-4.760	14.620
74.	7290.378	1.100	.310	3799.708	-12.880	-1.880	3575.533	-4.250	13.520
75.	7292.800	1.080	.250	3784.474	-13.020	-1.810	3571.294	-3.740	12.870
76.	7295.181	1.060	.210	3769.143	-13.090	-1.740	3567.577	-3.130	12.460
77.	7297.584	1.030	.170	3753.911	-13.090	-1.620	3564.495	-2.530	11.880
78.	7299.752	.990	.140	3738.769	-13.010	-1.530	3562.081	-1.910	11.090
79.	7301.906	.940	.110	3723.795	-12.860	-1.400	3560.353	-1.260	10.310
80.	7303.949	.890	.090	3709.105	-12.630	-1.330	3559.094	-.500	9.440
81.	7305.862	.830	.070	3694.795	-12.330	-1.230	3559.611	.110	8.630
82.	7307.627	.760	.050	3680.932	-11.960	-1.150	3559.611	.870	7.730
83.	7309.229	.680	.040	3667.502	-11.530	-1.070	3560.816	1.580	6.790
84.	7310.651	.600	.030	3654.044	-11.030	-1.030	3563.037	2.370	5.830
85.	7311.880	.510	.020	3642.750	-10.470	-1.000	3565.997	3.110	4.950
86.	7312.903	.410	.010	3631.364	-9.860	-0.960	3569.794	3.890	3.950
87.	7313.710	.310	.010	3620.734	-9.200	-0.900	3574.471	4.690	2.960
88.	7314.292	.210	0.000	3610.099	-8.510	-0.810	3580.015	5.470	1.980
89.	7314.644	.110	0.000	3601.450	-7.780	-0.740	3586.435	6.250	.920
90.	7314.761	-0.000	-0.000	3593.730	-7.030	0.000	3593.730	7.030	0.000
91.	7314.644	-0.110	0.000	3586.435	-6.250	.920	3601.450	7.780	-0.880
92.	7314.292	-0.210	0.010	3580.015	-5.470	1.080	3610.099	8.510	-1.710
93.	7313.710	-0.310	.010	3574.471	-4.690	2.060	3620.734	9.200	-2.470
94.	7312.903	-0.410	.010	3569.794	-3.890	3.050	3631.364	9.890	-3.160
95.	7311.880	-0.510	.020	3565.997	-3.110	4.050	3642.750	10.470	-3.780
96.	7310.651	-0.600	.030	3563.037	-2.330	5.030	3654.044	11.030	-4.320
97.	7309.229	-0.680	.040	3560.816	-1.580	6.000	3667.502	11.570	-4.770
98.	7307.627	-0.760	.050	3559.611	-.830	7.030	3680.932	11.960	-5.150
99.	7305.862	-0.830	.070	3559.611	-.110	8.000	3694.795	12.310	-5.430

Y-PLANE (XZ-PLANE) LITHIUM NIORATE (KOROLYUK ET AL)

	LWVEL	LPW12	LPW11	FSRVEL	FSR12	FSR13	SSRVEL	SSR12	SSR13
100.	7303.949	-0.899	.098	3559.357	.597	9.490	3709.106	12.630	SSPH13
101.	7301.906	-0.943	.110	3560.359	1.260	10.310	3723.745	12.869	-5.540
102.	7299.752	-0.990	.140	3562.081	1.910	11.080	3738.749	13.019	-5.770
103.	7297.504	-1.039	.170	3564.496	2.539	11.800	3753.911	13.099	-5.930
104.	7295.191	-1.060	.210	3567.577	3.130	12.460	3769.183	13.099	-5.929
105.	7292.800	-1.080	.250	3571.299	3.709	13.070	3784.674	13.020	-5.749
106.	7290.374	-1.100	.290	3575.633	4.250	13.620	3799.404	12.890	-5.510
107.	7287.930	-1.110	.330	3580.555	4.769	14.120	3814.384	12.680	-5.430
108.	7285.470	-1.110	.370	3586.040	5.260	14.570	3829.635	12.410	-5.210
109.	7283.000	-1.110	.410	3592.061	5.720	14.970	3844.175	12.090	-4.960
110.	7280.557	-1.100	.450	3598.594	6.160	15.320	3858.134	11.700	-4.580
111.	7278.120	-1.090	.490	3605.614	6.580	15.620	3872.047	11.270	-4.330
112.	7275.702	-1.080	.530	3613.096	6.979	15.880	3885.252	10.810	-4.170
113.	7273.303	-1.070	.570	3621.017	7.339	16.099	3897.914	10.300	-3.750
114.	7270.921	-1.070	.610	3629.352	7.670	16.270	3909.984	9.749	-3.430
115.	7268.551	-1.070	.650	3638.076	7.999	16.400	3921.427	9.230	-3.120
116.	7266.182	-1.070	.690	3647.165	8.289	16.500	3932.224	8.670	-2.540
117.	7263.803	-1.080	.730	3656.594	8.550	16.570	3942.363	8.110	-2.270
118.	7261.398	-1.100	.770	3666.377	8.799	16.610	3951.843	7.569	-2.040
119.	7259.947	-1.120	.810	3676.567	9.009	16.620	3960.672	7.020	-1.830
120.	7258.429	-1.160	.850	3686.657	9.190	16.600	3968.861	6.500	-1.650
121.	7256.820	-1.210	.890	3697.176	9.350	16.560	3976.462	6.010	-1.510
122.	7255.093	-1.270	.930	3707.894	9.490	16.500	3983.491	5.550	-1.400
123.	7253.214	-1.340	.970	3718.776	9.640	16.420	3989.952	5.150	-1.330
124.	7251.165	-1.430	1.010	3729.786	9.800	16.310	3995.857	4.790	-1.300
125.	7249.001	-1.530	1.050	3740.885	9.970	16.200	4001.224	4.500	-1.300
126.	7246.793	-1.650	1.100	3752.025	10.140	16.060	4007.080	4.290	-1.350
127.	7244.604	-1.790	1.150	3763.163	10.310	15.920	4012.213	4.130	-1.430
128.	7242.511	-1.940	1.200	3774.242	10.490	15.750	4017.229	4.060	-1.550
129.	7240.467	-2.100	1.250	3785.205	10.660	15.580	4022.205	4.090	-1.700
130.	7238.423	-2.280	1.300	3796.088	10.830	15.380	4027.242	4.200	-1.870
131.	7236.406	-2.480	1.350	3806.526	11.000	15.160	4032.264	4.410	-2.070
132.	7234.493	-2.690	1.400	3816.748	11.170	14.930	4037.264	4.610	-2.290
133.	7232.604	-2.920	1.450	3826.587	11.340	14.660	4042.252	4.810	-2.520
134.	7230.750	-3.150	1.500	3835.977	11.510	14.370	4047.229	5.010	-2.750
135.	7228.935	-3.400	1.550	3844.963	11.680	14.040	4052.205	5.200	-2.990
136.	7227.168	-3.670	1.600	3853.200	11.850	13.680	4056.294	5.390	-3.200
137.	7225.444	-3.960	1.650	3860.964	12.020	13.290	4060.384	5.580	-3.410
138.	7223.764	-4.270	1.700	3868.146	12.190	12.860	4064.474	5.770	-3.610
139.	7222.129	-4.610	1.750	3874.762	12.360	12.400	4068.562	5.960	-3.810
140.	7220.540	-4.970	1.800	3880.843	12.530	12.000	4072.652	6.150	-4.010
141.	7219.000	-5.360	1.850	3886.479	12.700	11.570	4076.742	6.340	-4.210
142.	7217.506	-5.770	1.900	3891.608	12.870	11.120	4080.832	6.530	-4.410
143.	7216.066	-6.200	1.950	3896.245	13.040	10.650	4084.922	6.720	-4.610
144.	7214.682	-6.650	2.000	3900.425	13.210	10.160	4089.012	6.910	-4.810
145.	7213.352	-7.120	2.050	3904.165	13.380	9.650	4093.102	7.100	-5.010
146.	7212.076	-7.610	2.100	3907.405	13.550	9.120	4097.192	7.290	-5.210
147.	7210.854	-8.120	2.150	3910.145	13.720	8.570	4101.282	7.480	-5.410
148.	7209.686	-8.650	2.200	3912.385	13.890	8.000	4105.372	7.670	-5.610
149.	7208.572	-9.200	2.250	3914.125	14.060	7.410	4109.462	7.860	-5.810
150.	7207.504	-9.770	2.300	3915.365	14.230	6.800	4113.552	8.050	-6.010

Y-PLANE (X7-PLANE) LITHIUM NIORATE (KOROLYUK ET AL)

	LMW12	LMW13	FSRWEL	FSPW12	FSPW13	SSRWEL	SSPW12	SSPW13
158.	-7.770	8.458	3924.861	3.204	7.450	4268.374	14.680	-6.120
151.	-9.030	8.510	1928.697	3.219	7.100	4287.056	16.759	-6.590
152.	-9.280	8.690	3932.550	3.220	6.760	4307.771	16.989	-6.850
153.	-9.510	8.730	3936.426	3.268	6.400	4328.070	15.180	-7.110
154.	-8.730	8.960	3940.329	3.320	6.170	4348.795	15.360	-7.150
155.	-8.920	8.917	3944.255	3.270	5.350	4369.692	15.650	-7.580
156.	-9.090	8.960	3948.198	3.289	5.579	4390.897	15.540	-7.740
157.	-9.220	8.960	3952.149	3.280	5.300	4412.296	15.580	-7.960
158.	-9.350	8.957	3956.095	3.279	5.040	4433.891	15.590	-8.110
159.	-9.430	8.910	3960.023	3.269	6.790	4455.637	15.540	-8.230
160.	-9.480	8.950	3964.917	3.209	6.550	4477.065	15.680	-8.320
161.	-9.400	8.750	3967.760	3.150	6.310	4498.581	15.300	-8.360
162.	-9.660	8.530	3971.534	3.089	4.040	4519.964	15.100	-8.360
163.	-9.390	8.490	3975.223	3.009	3.050	4541.184	16.449	-8.320
164.	-9.270	8.230	3978.809	2.919	3.620	4562.920	16.510	-8.240
165.	-9.110	8.050	3982.273	2.809	3.600	4584.301	16.130	-8.090
166.	-9.190	7.910	3985.599	2.649	3.170	4602.167	17.670	-7.900
167.	-9.510	7.430	3988.771	2.549	2.950	4621.379	17.159	-7.560
168.	-9.280	7.150	3991.773	2.390	2.720	4639.795	12.550	-7.160
169.	-7.880	6.750	3994.590	2.230	2.500	4657.365	11.449	-7.010
170.	-7.430	6.330	3997.209	2.070	2.280	4673.962	11.120	-6.500
171.	-6.910	5.850	3999.617	1.899	2.050	4689.604	10.290	-6.140
172.	-6.140	5.140	4001.803	1.700	1.830	4703.634	9.390	-5.520
173.	-5.700	4.740	4003.756	1.500	1.600	4716.515	8.410	-5.050
174.	-5.010	4.140	4005.467	1.300	1.370	4727.945	7.460	-4.530
175.	-4.240	3.550	4006.924	1.090	1.150	4737.995	6.269	-3.760
176.	-3.670	2.890	4008.133	.880	.920	4745.998	5.070	-3.050
177.	-2.640	2.190	4009.975	.660	.690	4752.467	3.850	-2.330
178.	-2.080	1.670	4009.752	.460	.460	4757.135	2.590	-1.570
179.	-1.490	.740	4010.160	.220	.230	4759.965	1.300	-0.790
180.	-9.800	0.000	4010.234	-0.000	-0.000	4760.900	-0.000	0.000

7-PLANE (XY-PLANE) LITHIUM NITRATE (KOROLYUK ET AL)

	LNGVEL	LOW12	LOW11	FSRVEL	FSQW12	FSQW13	SSRVEL	SSQW12	SSQW13
0.	5555.816	9.000	0.000	4760.900	0.000	0.000	4814.295	0.000	0.000
1.	5556.764	9.30	-0.740	4759.713	-1.630	0.700	4810.186	-0.180	-0.230
2.	5556.512	1.943	-1.470	4756.174	-3.240	1.570	4809.854	-0.450	-0.450
3.	5564.069	2.717	-2.140	4750.347	-4.780	2.340	4809.314	-0.540	-0.580
4.	5570.174	3.530	-2.810	4742.135	-6.250	3.090	4804.544	-0.720	-0.930
5.	5574.180	4.290	-3.550	4732.282	-7.600	3.820	4807.445	-0.910	-1.160
6.	5587.494	4.960	-4.130	4720.355	-8.830	4.520	4805.322	-1.100	-1.400
7.	5594.895	5.560	-4.730	4706.755	-9.920	5.190	4804.857	-1.290	-1.550
8.	5600.833	6.050	-5.350	4691.700	-10.860	5.830	4803.175	-1.480	-1.590
9.	5622.531	6.474	-5.930	4675.474	-11.660	6.430	4801.243	-1.660	-2.140
10.	5635.975	6.783	-6.330	4658.169	-12.260	7.010	4800.041	-1.840	-2.160
11.	5650.012	7.019	-6.840	4640.112	-12.710	7.550	4806.675	-2.070	-2.550
12.	5666.444	7.144	-7.260	4621.711	-13.010	8.050	4804.072	-2.270	-2.910
13.	5679.105	7.190	-7.650	4602.937	-13.140	8.540	4801.154	-2.450	-3.160
14.	5693.812	7.150	-8.000	4584.274	-13.120	8.990	4804.056	-2.590	-3.420
15.	5708.410	7.060	-8.337	4565.754	-12.980	9.410	4804.771	-2.700	-3.620
16.	5722.744	6.940	-8.600	4547.675	-12.650	9.800	4811.297	-2.930	-3.820
17.	5736.575	6.640	-8.870	4530.137	-12.210	10.150	4807.674	-3.060	-4.160
18.	5750.070	6.340	-9.100	4513.502	-11.660	10.490	4803.962	-3.110	-4.390
19.	5762.411	5.990	-9.310	4497.761	-10.990	10.780	4803.142	-3.140	-4.510
20.	5776.747	5.580	-9.430	4483.045	-10.230	11.050	4805.451	-3.170	-4.620
21.	5785.900	5.143	-9.550	4469.522	-9.390	11.300	4807.612	-3.450	-4.714
22.	5796.053	4.667	-9.400	4457.261	-8.440	11.510	4809.004	-3.010	-4.140
23.	5805.197	4.143	-9.920	4446.333	-7.520	11.690	4805.401	-2.720	-3.730
24.	5813.235	3.591	-10.130	4436.784	-6.510	11.850	4809.714	-2.450	-3.570
25.	5820.114	3.021	-10.130	4428.665	-5.470	11.980	4807.384	-2.174	-3.570
26.	5825.798	2.433	-10.130	4421.900	-4.800	12.090	4805.561	-1.740	-3.570
27.	5830.236	1.833	-10.230	4416.730	-3.374	12.170	4804.541	-1.410	-3.570
28.	5833.490	1.213	-10.230	4413.044	-2.270	12.230	4804.247	-0.840	-3.400
29.	5835.269	0.580	-10.370	4410.790	-1.130	12.270	4803.525	-0.370	-3.170
30.	5835.836	-0.050	-10.310	4410.070	-0.020	12.240	4803.414	0.150	-3.460
31.	5835.079	-0.580	-10.310	4410.737	1.090	12.240	4803.912	0.590	-3.540
32.	5833.020	-1.100	-10.210	4412.913	2.100	12.250	4805.012	1.150	-3.810
33.	5829.567	-1.920	-10.250	4416.438	3.100	12.200	4806.544	1.820	-3.750
34.	5819.173	-2.520	-10.130	4421.619	4.090	12.120	4804.884	2.480	-3.700
35.	5812.103	-3.110	-10.130	4428.474	5.470	12.020	4801.554	3.000	-3.510
36.	5802.490	-3.580	-10.040	4436.607	6.520	11.890	4804.634	2.780	-3.500
37.	5801.990	-4.230	-9.910	4446.154	7.560	11.740	4804.054	2.940	-3.370
38.	5796.563	-4.740	-9.810	4457.139	8.520	11.560	4801.715	3.120	-3.210
39.	5786.219	-5.230	-9.670	4469.463	9.450	11.340	4805.555	3.270	-3.060
40.	5772.927	-5.670	-9.510	4483.037	10.300	11.100	4809.895	3.280	-2.850
41.	5760.776	-6.070	-9.370	4497.872	11.070	10.830	4807.307	3.270	-2.640
42.	5747.965	-6.420	-9.110	4513.757	11.750	10.530	4804.854	3.210	-2.420
43.	5734.703	-6.720	-8.840	4530.592	12.310	10.200	4801.234	3.110	-2.180
44.	5720.213	-6.960	-8.620	4548.273	12.760	9.870	4804.967	2.980	-1.940
45.	5705.725	-7.130	-8.330	4566.425	13.070	9.460	4808.473	2.820	-1.680
46.	5690.993	-7.230	-8.030	4585.154	13.240	9.020	4801.401	2.650	-1.430
47.	5676.140	-7.260	-7.670	4604.044	13.250	8.570	4804.404	2.450	-1.160
48.	5661.359	-7.200	-7.290	4622.910	13.110	8.090	4807.771	2.250	-0.900
49.	5646.813	-7.060	-6.960	4641.553	12.810	7.570	4800.391	2.050	-0.640

7-PLANE (XY-PLANE) LITHIUM NITRATE (KOPOLYMER ET AL)

	LNGLVL	LOW112	LOW113	FSRVEL	FSPH112	FSPH113	SSPHVL	SSPH112	SSPH113
50.	5632.591	-6.939	-6.470	4659.701	12.750	7.020	4002.761	1.869	-2.189
51.	5610.147	-5.500	-5.010	4677.092	11.729	5.840	4004.979	1.539	-2.120
52.	5606.199	-5.090	-5.370	4693.447	10.930	5.820	4006.748	1.430	-1.970
53.	5596.622	-5.570	-4.930	4709.649	9.970	5.180	4009.377	1.230	-1.520
54.	5583.399	-6.979	-4.200	4722.113	9.470	4.500	4009.748	1.030	-1.170
55.	5576.700	-4.284	-3.550	4736.286	7.520	3.790	4010.888	.840	-1.130
56.	5565.882	-3.510	-2.480	4746.559	5.250	3.060	4011.783	.650	-1.190
57.	5550.583	-2.671	-2.110	4752.158	4.760	2.390	4012.867	.460	-1.550
58.	5556.215	-1.700	-1.650	4758.144	3.200	1.570	4012.812	.270	-1.420
59.	5553.562	-.960	-.730	4761.612	1.580	.740	4013.132	.090	-.180
60.	5552.774	-.063	-.910	4762.701	-.040	-.050	4013.127	-.100	.150
61.	5551.454	1.021	.750	4764.390	-1.730	-.450	4012.907	-.280	.280
62.	5551.422	1.340	1.480	4767.705	-3.350	-1.570	4012.641	-.470	.520
63.	5551.534	2.321	2.210	4771.12	-4.900	-2.410	4011.754	-.650	.750
64.	5550.057	3.550	2.990	4773.529	-6.370	-3.160	4010.844	-.840	.940
65.	5576.155	4.410	3.570	4777.274	-7.730	-3.890	4009.505	-1.040	1.230
66.	5585.709	5.090	4.210	4781.143	-8.360	-4.500	4009.117	-1.230	1.470
67.	5595.570	5.640	4.810	4787.149	-10.050	-5.270	4006.541	-1.460	1.720
68.	5603.565	6.190	5.190	4802.097	-10.990	-5.910	4004.804	-1.640	1.970
69.	5621.512	6.590	5.910	4815.511	-11.760	-6.520	4002.576	-1.850	2.220
70.	5635.225	6.910	6.410	4828.137	-12.370	-7.100	4000.294	-2.050	2.470
71.	5649.515	7.130	6.950	4840.047	-12.820	-7.540	3997.557	-2.270	2.730
72.	5669.293	7.260	7.280	4851.429	-13.100	-8.150	3994.765	-2.480	2.990
73.	5679.104	7.310	7.550	4862.589	-13.220	-8.530	3991.529	-2.680	3.250
74.	5698.050	7.270	8.110	4873.753	-13.190	-9.040	3988.253	-2.870	3.510
75.	5708.879	7.160	8.320	4885.175	-13.000	-9.490	3984.557	-3.060	3.760
76.	5723.435	6.980	8.410	4897.011	-12.630	-9.880	3980.965	-3.200	4.010
77.	5737.579	6.740	8.870	4899.524	-12.230	-10.230	3976.908	-3.320	4.260
78.	5751.190	6.430	9.110	4912.824	-11.650	-10.560	3972.977	-3.410	4.480
79.	5765.116	6.080	9.310	4927.031	-10.970	-10.850	3968.572	-3.450	4.690
80.	5776.279	5.570	9.430	4942.423	-10.200	-11.110	3964.504	-3.430	4.900
81.	5787.570	5.220	9.550	4958.955	-9.350	-11.150	3960.391	-3.350	5.080
82.	5797.901	4.730	9.730	4966.764	-8.330	-11.550	3956.407	-3.230	5.250
83.	5807.195	4.210	9.970	4985.414	-7.460	-11.730	3952.1630	-3.020	5.390
84.	5815.384	3.660	10.070	4986.454	-6.450	-11.880	3949.144	-2.750	5.520
85.	5822.410	3.090	10.110	4988.418	-5.410	-12.000	3946.035	-2.410	5.620
86.	5828.224	2.500	10.140	4991.876	-4.350	-12.100	3943.371	-2.010	5.710
87.	5832.786	1.890	10.230	4996.692	-3.270	-12.170	3941.222	-1.560	5.770
88.	5836.067	1.260	10.270	4998.022	-2.181	-12.220	3939.644	-1.050	5.820
89.	5838.044	.630	10.290	4998.814	-1.040	-12.250	3938.679	-.560	5.850
90.	5839.704	-.000	10.310	4999.045	0.000	-12.270	3938.155	.000	5.860
91.	5841.046	-.630	10.290	4998.819	1.090	-12.250	3938.155	.560	5.850
92.	5836.067	-1.260	10.270	4996.692	2.180	-12.220	3939.644	1.060	5.770
93.	5832.786	-1.890	10.230	4991.876	3.270	-12.170	3941.222	1.560	5.710
94.	5828.224	-2.500	10.140	4988.418	4.350	-12.100	3943.371	2.010	5.710
95.	5822.410	-3.090	10.110	4986.418	5.410	-12.000	3946.035	2.410	5.620
96.	5815.384	-3.660	10.070	4985.414	6.450	-11.880	3949.144	2.750	5.520
97.	5807.195	-4.210	9.970	4986.454	7.460	-11.730	3952.1630	3.020	5.390
98.	5797.901	-4.730	9.730	4966.764	8.330	-11.550	3956.407	3.230	5.250
99.	5787.570	-5.220	9.550	4958.955	9.350	-11.150	3960.391	3.350	5.080

Z-PLANE (XY-PLANE) LITHIUM NIOSBATE (KOPOLYUK ET AL)

	LPM12	LPM11	FSMEL	FSM12	FSM13	SSMEL	SSM12	SSM13
100.	5776.279	-5.670	4492.423	10.200	-11.110	3964.584	3.430	4.900
101.	5764.116	-6.080	4497.081	10.973	-10.950	3964.672	3.450	4.490
102.	5751.100	-6.430	4512.024	11.450	-10.560	3972.827	3.419	4.480
103.	5737.579	-6.740	4529.524	12.230	-10.230	3976.904	3.320	4.250
104.	5723.435	-6.980	4547.031	12.680	-9.880	3980.865	3.200	4.010
105.	5708.478	-7.160	4565.175	13.000	-9.490	3984.657	3.048	3.764
106.	5694.050	-7.270	4583.763	13.190	-9.090	3984.257	2.879	3.510
107.	5679.104	-7.310	4602.569	13.220	-8.630	3984.620	2.680	3.250
108.	5664.203	-7.260	4621.429	13.180	-8.150	3984.764	2.480	2.990
109.	5649.516	-7.130	4640.047	12.920	-7.640	3984.657	2.270	2.730
110.	5635.225	-6.910	4658.197	12.174	-7.100	3984.294	2.060	2.470
111.	5621.512	-6.590	4675.831	11.760	-6.520	3982.574	1.850	2.220
112.	5608.565	-6.190	4692.947	10.990	-5.910	3980.404	1.640	1.970
113.	5596.570	-5.680	4707.749	10.050	-5.270	3980.681	1.440	1.720
114.	5585.709	-5.090	4721.149	8.960	-4.580	3980.310	1.230	1.470
115.	5576.155	-4.410	4733.274	7.730	-3.790	3980.094	1.040	1.230
116.	5568.067	-3.650	4744.520	6.370	-3.160	3980.044	.860	.990
117.	5561.584	-2.820	4754.712	4.900	-2.610	3981.1754	.650	.750
118.	5556.622	-1.940	4763.745	3.350	-2.150	3982.441	.470	.520
119.	5553.066	-1.020	4771.390	1.730	-1.850	3982.997	.280	.350
120.	5552.774	-.053	4782.701	.000	-.050	3983.127	.190	.250
121.	5553.562	.860	4791.612	-1.580	.740	3983.137	-.090	-.140
122.	5556.215	1.700	4798.144	-3.200	1.530	3982.912	-.270	-.420
123.	5560.683	2.470	4792.358	-4.760	2.300	3982.467	-.460	-.550
124.	5565.882	3.180	4784.359	-6.250	3.060	3981.1747	-.690	-.840
125.	5570.790	4.280	4774.246	-7.620	3.790	3980.084	-.940	-1.170
126.	5583.999	4.970	4722.313	-8.870	4.500	3979.760	-1.030	-1.370
127.	5594.622	5.570	4704.540	-9.970	5.180	3980.377	-1.230	-1.520
128.	5606.399	6.090	4693.447	-10.930	5.820	3980.674	-1.430	-1.870
129.	5619.147	6.580	4677.892	-11.720	6.440	3980.4870	-1.630	-2.120
130.	5632.681	6.830	4659.701	-12.350	7.020	3982.761	-1.840	-2.380
131.	5646.913	7.060	4641.553	-12.910	7.570	3980.391	-2.050	-2.640
132.	5661.359	7.200	4622.830	-13.110	8.090	3997.771	-2.250	-2.900
133.	5676.148	7.260	4604.044	-13.250	8.570	3994.905	-2.450	-3.160
134.	5690.983	7.230	4585.154	-13.240	9.020	3991.981	-2.650	-3.430
135.	5705.725	7.130	4566.475	-13.070	9.440	3984.672	-2.820	-3.690
136.	5720.213	6.960	4548.223	-12.760	9.830	3984.947	-2.990	-3.940
137.	5734.303	6.720	4530.592	-12.310	10.200	3981.238	-3.110	-4.190
138.	5747.865	6.420	4513.757	-11.750	10.530	3977.397	-3.210	-4.420
139.	5760.776	6.070	4497.472	-11.070	10.830	3973.464	-3.270	-4.640
140.	5772.927	5.670	4483.470	-10.300	11.100	3969.446	-3.290	-4.850
141.	5784.219	5.230	4469.463	-9.450	11.340	3965.555	-3.230	-5.040
142.	5794.503	4.740	4457.139	-8.520	11.560	3961.915	-3.120	-5.210
143.	5803.880	4.230	4446.168	-7.540	11.740	3958.050	-2.960	-5.370
144.	5812.183	3.690	4436.603	-6.520	11.890	3954.534	-2.700	-5.500
145.	5819.173	3.110	4428.478	-5.470	12.020	3951.554	-2.480	-5.510
146.	5825.041	2.520	4421.819	-4.390	12.120	3948.845	-2.030	-5.700
147.	5829.667	1.920	4416.638	-3.300	12.200	3946.684	-1.620	-5.760
148.	5833.020	1.300	4412.943	-2.190	12.250	3945.012	-1.150	-5.810
149.	5835.079	.680	4410.737	-1.090	12.240	3943.910	-.690	-5.840

7-PLANE (XY-PLANE) LITHIUM NITRATE (KOROLYUK ET AL)

	LMVEL	LMH12	LMH13	FSPWFL	FSPH12	FSPH13	SSPVEL	SSPH12	SSPH13
148.	5815.830	.059	-10.717	4410.020	.020	12.280	3963.414	-.158	12.280
151.	5835.269	-.550	-10.370	4410.790	1.110	12.270	3963.524	.379	12.270
152.	5837.400	-1.210	-10.240	4413.044	2.230	12.230	3964.267	.949	12.230
153.	5838.236	-1.870	-10.200	4416.780	3.320	12.170	3965.561	1.319	12.170
154.	5828.790	-2.430	-10.130	4421.900	4.400	12.090	3967.364	1.760	12.090
155.	5820.119	-3.020	-10.170	4428.665	5.470	11.980	3969.714	2.180	11.980
156.	5813.235	-3.590	-10.030	4436.784	6.510	11.850	3972.681	2.650	11.850
157.	5805.197	-4.160	-9.920	4446.333	7.520	11.690	3975.501	2.720	11.690
158.	5796.063	-4.660	-9.810	4457.251	8.480	11.510	3978.084	2.919	11.510
159.	5785.900	-5.140	-9.660	4469.522	9.390	11.300	3982.617	3.059	11.300
160.	5774.787	-5.580	-9.490	4483.045	10.230	11.050	3986.781	3.159	11.050
161.	5762.411	-5.990	-9.310	4497.741	10.990	10.780	3978.210	3.160	10.780
162.	5750.070	-6.340	-9.100	4513.502	11.680	10.480	3973.967	3.110	10.480
163.	5736.675	-6.660	-8.870	4530.197	12.210	10.150	3977.674	3.040	10.150
164.	5722.744	-6.960	-8.620	4547.575	12.650	9.800	3981.297	2.939	9.800
165.	5708.410	-7.240	-8.350	4565.764	13.120	9.410	3984.771	2.790	9.410
166.	5693.812	-7.500	-8.080	4584.274	13.520	8.990	3988.066	2.650	8.990
167.	5679.105	-7.740	-7.820	4602.907	13.860	8.560	3991.154	2.520	8.560
168.	5664.444	-7.960	-7.580	4621.711	14.140	8.080	3994.037	2.270	8.080
169.	5650.912	-8.180	-7.310	4640.142	14.370	7.550	3996.675	2.079	7.550
170.	5635.976	-8.390	-7.030	4658.169	14.560	7.010	3999.081	1.839	7.010
171.	5622.521	-8.470	-6.740	4675.424	14.680	6.430	4001.280	1.580	6.430
172.	5609.833	-8.560	-6.450	4691.700	14.760	5.830	4003.176	1.369	5.830
173.	5598.095	-8.560	-6.170	4706.755	9.920	5.190	4004.867	1.290	5.190
174.	5587.480	-8.560	-5.920	4720.355	8.830	4.520	4006.322	1.109	4.520
175.	5578.180	-8.290	-5.590	4732.282	7.600	3.820	4007.545	.910	3.820
176.	5570.328	-7.930	-5.240	4742.346	6.250	3.090	4008.561	.770	3.090
177.	5564.068	-7.470	-4.890	4750.367	4.780	2.340	4009.319	.599	2.340
178.	5559.512	-6.930	-4.470	4756.174	3.240	1.570	4009.854	.360	1.570
179.	5555.744	-6.300	-4.000	4759.713	1.630	.790	4010.184	.180	.790
180.	5555.816	0.000	-0.000	4760.900	-0.000	-0.000	4010.295	-0.000	-0.000

X-PLANE (YZ-PLANE) LITHIUM TANTALATE (SMITH AND WELSH)

BULK

	LNGL	LPM12	LPM13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	5668.867	12.030	0.000	3862.959	-16.510	-0.000	3530.313	-6.390	0.000
1.	5711.428	12.910	0.000	3862.438	-17.250	-0.000	3523.432	-6.374	0.000
2.	5734.515	13.110	0.000	3841.143	-17.660	-0.000	3510.542	-6.340	0.000
3.	5757.995	13.230	0.000	3819.220	-18.410	-0.000	3504.600	-6.330	0.000
4.	5781.744	13.300	0.000	3796.812	-18.640	-0.000	3503.067	-6.320	0.000
5.	5805.846	13.300	0.000	3774.055	-19.160	-0.000	3496.399	-6.200	0.000
6.	5829.599	13.240	0.000	3751.076	-19.390	-0.000	3489.605	-6.140	0.000
7.	5853.497	13.140	0.000	3728.003	-19.530	-0.000	3483.295	-6.070	0.000
8.	5877.251	12.960	0.000	3704.946	-19.590	-0.000	3476.676	-5.990	0.000
9.	5900.776	12.790	0.000	3682.022	-19.550	-0.000	3470.527	-5.910	0.000
10.	5923.995	12.560	0.000	3659.330	-19.440	-0.000	3464.345	-5.810	0.000
11.	5946.837	12.300	0.000	3636.969	-19.250	-0.000	3458.250	-5.710	0.000
12.	5969.219	12.010	0.000	3615.032	-18.960	-0.000	3452.250	-5.600	0.000
13.	5991.141	11.690	0.000	3593.604	-18.630	-0.000	3446.441	-5.480	0.000
14.	6012.491	11.350	0.000	3572.767	-18.210	-0.000	3440.743	-5.350	0.000
15.	6033.242	10.960	0.000	3552.595	-17.720	-0.000	3435.142	-5.220	0.000
16.	6053.352	10.600	0.000	3533.159	-17.160	-0.000	3429.796	-5.070	0.000
17.	6072.782	10.200	0.000	3514.522	-16.540	-0.000	3424.563	-4.920	0.000
18.	6091.500	9.790	0.000	3496.742	-15.850	-0.000	3419.500	-4.770	0.000
19.	6109.477	9.370	0.000	3479.874	-15.110	-0.000	3414.613	-4.600	0.000
20.	6126.687	8.940	0.000	3463.965	-14.330	-0.000	3409.909	-4.430	0.000
21.	6143.109	8.500	0.000	3449.058	-13.450	-0.000	3405.395	-4.250	0.000
22.	6158.726	8.050	0.000	3435.186	-12.540	-0.000	3401.077	-4.060	0.000
23.	6173.524	7.600	0.000	3422.367	-11.600	-0.000	3396.961	-3.870	0.000
24.	6187.491	7.150	0.000	3410.661	-10.610	-0.000	3393.053	-3.670	0.000
25.	6200.619	6.700	0.000	3400.091	-9.590	-0.000	3389.359	-3.470	0.000
26.	6212.905	6.240	0.000	3390.630	-8.550	-0.000	3385.862	-3.260	0.000
27.	6224.346	5.790	0.000	3382.630	-7.480	-0.000	3382.306	-3.040	0.000
28.	6234.942	5.340	0.000	3375.130	-6.400	-0.000	3379.605	-2.820	0.000
29.	6244.697	4.900	0.000	3369.092	-5.310	-0.000	3376.813	-2.600	0.000
30.	6253.617	4.460	0.000	3364.190	-4.230	-0.000	3374.237	-2.370	0.000
31.	6261.710	4.020	0.000	3360.410	-3.150	-0.000	3371.941	-2.140	0.000
32.	6268.967	3.590	0.000	3357.736	-2.060	-0.000	3369.660	-1.900	0.000
33.	6275.461	3.160	0.000	3356.147	-1.030	-0.000	3366.042	-1.660	0.000
34.	6281.147	2.770	0.000	3356.616	-0.010	-0.000	3360.465	-1.420	0.000
35.	6286.062	2.370	0.000	3356.113	1.900	-0.000	3365.138	-1.170	0.000
36.	6290.224	1.980	0.000	3357.603	1.930	-0.000	3369.002	-0.930	0.000
37.	6293.655	1.600	0.000	3360.049	2.840	-0.000	3374.665	-0.670	0.000
38.	6296.377	1.240	0.000	3363.407	3.700	-0.000	3382.376	-0.420	0.000
39.	6298.414	0.890	0.000	3367.634	4.520	-0.000	3392.537	-0.330	0.000
40.	6299.793	0.550	0.000	3372.661	5.260	-0.000	3403.002	-0.000	0.000
41.	6300.540	0.230	0.000	3378.497	5.950	-0.000	3413.724	0.000	0.000
42.	6300.684	0.000	0.000	3385.030	6.640	-0.000	3424.700	1.080	0.000
43.	6300.254	-0.370	0.000	3392.224	7.230	-0.000	3435.930	1.320	0.000
44.	6299.262	-0.640	0.000	3400.022	7.760	-0.000	3446.413	1.570	0.000
45.	6297.000	-0.900	0.000	3408.366	8.230	-0.000	3456.145	1.610	0.000
46.	6295.840	-1.140	0.000	3417.202	8.640	-0.000	3465.095	2.000	0.000
47.	6293.435	-1.360	0.000	3426.464	8.990	-0.000	3474.124	2.260	0.000
48.	6290.621	-1.570	0.000	3436.095	9.280	-0.000	3483.348	2.260	0.000
49.	6287.431	-1.760	0.000	3446.035	9.510	-0.000			

X-PLANE (YZ-PLANE) LITHIUM TANTALATE (SMITH AND WELSH)

BULK

	LMGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
50.	6283.501	-1.950	-0.000	3456.223	9.660	-0.000	3375.033	2.510	-0.000
51.	6280.066	-2.060	-0.000	3466.600	9.660	-0.000	3376.516	2.740	-0.000
52.	6275.960	-2.210	-0.000	3477.107	9.670	-0.000	3381.452	2.960	-0.000
53.	6271.620	-2.330	-0.000	3487.688	9.680	0.000	3384.619	3.160	-0.000
54.	6267.079	-2.420	-0.000	3498.205	9.640	0.000	3384.010	3.390	-0.000
55.	6262.373	-2.500	-0.000	3508.843	9.750	0.000	3391.623	3.600	-0.000
56.	6257.536	-2.560	-0.000	3519.310	9.610	0.000	3395.450	3.600	-0.000
57.	6252.600	-2.610	-0.000	3529.633	9.430	0.000	3393.437	3.990	-0.000
58.	6247.597	-2.640	-0.000	3539.763	9.210	0.000	3403.729	4.100	-0.000
59.	6242.560	-2.650	-0.000	3549.654	8.950	0.000	3406.169	4.360	-0.000
60.	6237.516	-2.650	-0.000	3559.259	8.650	0.000	3412.002	4.240	-0.000
61.	6232.499	-2.630	-0.000	3568.538	8.310	0.000	3417.620	4.700	-0.000
62.	6227.532	-2.600	-0.000	3577.449	7.950	0.000	3422.617	4.670	-0.000
63.	6222.641	-2.550	-0.000	3585.957	7.550	0.000	3427.766	5.020	-0.000
64.	6217.852	-2.500	-0.000	3594.026	7.120	0.000	3433.121	5.160	-0.000
65.	6213.185	-2.430	-0.000	3601.626	6.670	0.000	3438.014	5.360	-0.000
66.	6208.662	-2.350	-0.000	3608.729	6.200	0.000	3444.237	5.430	-0.000
67.	6204.300	-2.260	-0.000	3615.307	5.710	0.000	3450.543	5.550	-0.000
68.	6200.116	-2.160	-0.000	3621.339	5.200	0.000	3456.964	5.670	-0.000
69.	6196.125	-2.060	-0.000	3626.806	4.660	0.000	3463.013	5.770	-0.000
70.	6192.336	-1.950	-0.000	3631.690	4.140	0.000	3468.131	5.870	-0.000
71.	6188.765	-1.840	-0.000	3635.976	3.590	0.000	3474.460	5.960	-0.000
72.	6185.414	-1.720	-0.000	3639.659	3.040	0.000	3480.862	6.040	-0.000
73.	6182.291	-1.600	-0.000	3642.724	2.460	0.000	3487.315	6.120	-0.000
74.	6179.400	-1.470	-0.000	3645.169	1.920	0.000	3493.822	6.190	-0.000
75.	6176.742	-1.350	-0.000	3646.997	1.360	0.000	3500.282	6.240	-0.000
76.	6174.318	-1.230	-0.000	3648.180	.790	0.000	3507.232	6.280	-0.000
77.	6172.125	-1.110	-0.000	3648.751	.230	0.000	3514.003	6.320	-0.000
78.	6170.159	-0.990	-0.000	3648.701	-.320	0.000	3520.625	6.360	-0.000
79.	6168.415	-0.870	-0.000	3648.036	-.870	0.000	3527.611	6.380	-0.000
80.	6166.886	-0.760	-0.000	3646.766	-1.416	0.000	3534.593	6.400	-0.000
81.	6165.564	-0.650	-0.000	3644.903	-1.940	0.000	3541.520	6.400	-0.000
82.	6164.436	-0.550	-0.000	3642.452	-2.470	0.000	3548.450	6.400	-0.000
83.	6163.497	-0.450	-0.000	3639.430	-2.960	0.000	3555.420	6.400	-0.000
84.	6162.730	-0.360	-0.000	3635.850	-3.470	0.000	3562.375	6.360	-0.000
85.	6162.122	-0.280	-0.000	3631.729	-3.960	0.000	3569.323	6.360	-0.000
86.	6161.661	-0.210	0.000	3627.084	-4.430	0.000	3576.254	6.330	-0.000
87.	6161.330	-0.140	0.000	3621.934	-4.866	0.000	3583.161	6.240	-0.000
88.	6161.124	-.090	0.000	3616.298	-5.320	0.000	3590.035	6.200	-0.000
89.	6160.997	-.040	0.000	3610.197	-5.690	0.000	3596.869	6.150	-0.000
90.	6160.962	0.000	0.000	3603.653	-6.130	0.000	3603.653	6.130	-0.000
91.	6160.991	.030	0.000	3596.690	-6.550	-0.000	3610.351	6.070	-0.000
92.	6161.067	.050	0.000	3589.331	-6.870	-0.000	3617.044	5.990	-0.000
93.	6161.172	.060	0.000	3581.603	-7.210	-0.000	3623.634	5.910	-0.000
94.	6161.286	.060	0.000	3573.531	-7.520	-0.000	3630.144	5.830	-0.000
95.	6161.392	.050	0.000	3565.143	-7.810	-0.000	3636.587	5.740	-0.000
96.	6161.471	.030	0.000	3556.466	-8.060	-0.000	3642.895	5.640	-0.000
97.	6161.503	0.000	0.000	3547.536	-8.320	-0.000	3649.121	5.540	-0.000
98.	6161.470	-.040	0.000	3538.376	-8.530	-0.000	3655.237	5.430	-0.000
99.	6161.351	-.090	0.000	3529.027	-8.710	-0.000	3661.236	5.310	-0.000

X-PLANE (YZ-PLANE) LITHIUM TANTALATE (SMITH AND WELSH)

X-PLANE (YZ-PLANE) LITHIUM TANTALATE (SMITH AND WELSH)																	
BULK				BULK				BULK				BULK					
LNGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	6161.126	0.000	3519.515	-6.866	-0.000	3667.115	5.150	-0.000	100.	6161.126	0.000	3519.515	-6.866	-0.000	3667.115	5.150	-0.000
101.	6160.781	0.000	3509.879	-9.070	-0.000	3672.804	5.060	-0.000	101.	6160.781	0.000	3509.879	-9.070	-0.000	3672.804	5.060	-0.000
102.	6160.290	0.000	3500.154	-9.130	-0.000	3678.476	4.930	-0.000	102.	6160.290	0.000	3500.154	-9.130	-0.000	3678.476	4.930	-0.000
103.	6159.637	0.000	3490.376	-9.150	-0.000	3683.947	4.800	-0.000	103.	6159.637	0.000	3490.376	-9.150	-0.000	3683.947	4.800	-0.000
104.	6158.801	0.000	3480.591	-9.120	-0.000	3689.270	4.660	-0.000	104.	6158.801	0.000	3480.591	-9.120	-0.000	3689.270	4.660	-0.000
105.	6157.764	0.000	3470.833	-9.060	-0.000	3694.439	4.510	-0.000	105.	6157.764	0.000	3470.833	-9.060	-0.000	3694.439	4.510	-0.000
106.	6156.505	0.000	3461.146	-8.960	-0.000	3699.449	4.360	-0.000	106.	6156.505	0.000	3461.146	-8.960	-0.000	3699.449	4.360	-0.000
107.	6155.006	0.000	3451.573	-8.820	-0.000	3704.294	4.210	-0.000	107.	6155.006	0.000	3451.573	-8.820	-0.000	3704.294	4.210	-0.000
108.	6153.240	0.000	3442.155	-8.630	-0.000	3708.966	4.050	-0.000	108.	6153.240	0.000	3442.155	-8.630	-0.000	3708.966	4.050	-0.000
109.	6151.211	0.000	3432.945	-8.390	-0.000	3713.466	3.890	-0.000	109.	6151.211	0.000	3432.945	-8.390	-0.000	3713.466	3.890	-0.000
110.	6146.878	0.000	3423.990	-8.110	-0.000	3717.708	3.730	-0.000	110.	6146.878	0.000	3423.990	-8.110	-0.000	3717.708	3.730	-0.000
111.	6146.225	0.000	3415.330	-7.760	-0.000	3721.923	3.560	-0.000	111.	6146.225	0.000	3415.330	-7.760	-0.000	3721.923	3.560	-0.000
112.	6143.246	0.000	3407.014	-7.390	-0.000	3725.065	3.390	-0.000	112.	6143.246	0.000	3407.014	-7.390	-0.000	3725.065	3.390	-0.000
113.	6139.912	0.000	3391.639	-6.960	-0.000	3729.022	3.210	-0.000	113.	6139.912	0.000	3391.639	-6.960	-0.000	3729.022	3.210	-0.000
114.	6136.209	0.000	3384.671	-6.470	-0.000	3733.177	3.040	-0.000	114.	6136.209	0.000	3384.671	-6.470	-0.000	3733.177	3.040	-0.000
115.	6132.120	0.000	3372.436	-5.930	-0.000	3736.532	2.860	-0.000	115.	6132.120	0.000	3372.436	-5.930	-0.000	3736.532	2.860	-0.000
116.	6127.625	0.000	3357.265	-5.340	-0.000	3742.625	2.670	-0.000	116.	6127.625	0.000	3357.265	-5.340	-0.000	3742.625	2.670	-0.000
117.	6122.720	0.000	3340.791	-4.690	-0.000	3745.356	2.500	-0.000	117.	6122.720	0.000	3340.791	-4.690	-0.000	3745.356	2.500	-0.000
118.	6117.376	0.000	3322.436	-4.000	-0.000	3747.074	2.330	-0.000	118.	6117.376	0.000	3322.436	-4.000	-0.000	3747.074	2.330	-0.000
119.	6111.588	0.000	3307.265	-3.250	-0.000	3750.175	2.160	-0.000	119.	6111.588	0.000	3307.265	-3.250	-0.000	3750.175	2.160	-0.000
120.	6105.336	0.000	3289.086	-2.450	-0.000	3752.256	1.990	-0.000	120.	6105.336	0.000	3289.086	-2.450	-0.000	3752.256	1.990	-0.000
121.	6098.610	0.000	3266.166	-1.600	-0.000	3754.119	1.830	-0.000	121.	6098.610	0.000	3266.166	-1.600	-0.000	3754.119	1.830	-0.000
122.	6091.398	0.000	3252.900	-1.210	-0.000	3755.758	1.670	-0.000	122.	6091.398	0.000	3252.900	-1.210	-0.000	3755.758	1.670	-0.000
123.	6083.682	0.000	3232.650	1.220	-0.000	3757.172	1.510	-0.000	123.	6083.682	0.000	3232.650	1.220	-0.000	3757.172	1.510	-0.000
124.	6075.472	0.000	3213.365	2.190	-0.000	3758.360	1.350	-0.000	124.	6075.472	0.000	3213.365	2.190	-0.000	3758.360	1.350	-0.000
125.	6066.739	0.000	3195.086	3.220	-0.000	3759.320	1.190	-0.000	125.	6066.739	0.000	3195.086	3.220	-0.000	3759.320	1.190	-0.000
126.	6057.484	0.000	3177.840	4.270	-0.000	3760.053	1.030	-0.000	126.	6057.484	0.000	3177.840	4.270	-0.000	3760.053	1.030	-0.000
127.	6047.700	0.000	3161.680	5.330	-0.000	3760.556	0.870	-0.000	127.	6047.700	0.000	3161.680	5.330	-0.000	3760.556	0.870	-0.000
128.	6037.353	0.000	3146.607	6.410	-0.000	3760.829	0.710	-0.000	128.	6037.353	0.000	3146.607	6.410	-0.000	3760.829	0.710	-0.000
129.	6026.530	0.000	3132.652	7.460	-0.000	3760.973	0.550	-0.000	129.	6026.530	0.000	3132.652	7.460	-0.000	3760.973	0.550	-0.000
130.	6015.135	0.000	3119.830	8.560	-0.000	3760.987	0.390	-0.000	130.	6015.135	0.000	3119.830	8.560	-0.000	3760.987	0.390	-0.000
131.	6003.213	0.000	3108.154	9.620	-0.000	3760.871	0.230	-0.000	131.	6003.213	0.000	3108.154	9.620	-0.000	3760.871	0.230	-0.000
132.	5990.752	0.000	3097.630	10.670	-0.000	3760.626	0.070	-0.000	132.	5990.752	0.000	3097.630	10.670	-0.000	3760.626	0.070	-0.000
133.	5977.764	0.000	3088.154	11.640	-0.000	3759.271	0.000	-0.000	133.	5977.764	0.000	3088.154	11.640	-0.000	3759.271	0.000	-0.000
134.	5964.254	0.000	3079.034	12.680	-0.000	3757.820	0.000	-0.000	134.	5964.254	0.000	3079.034	12.680	-0.000	3757.820	0.000	-0.000
135.	5950.232	0.000	3070.034	13.630	-0.000	3756.282	0.000	-0.000	135.	5950.232	0.000	3070.034	13.630	-0.000	3756.282	0.000	-0.000
136.	5935.711	0.000	3061.680	14.530	-0.000	3754.659	0.000	-0.000	136.	5935.711	0.000	3061.680	14.530	-0.000	3754.659	0.000	-0.000
137.	5920.705	0.000	3053.722	15.350	-0.000	3752.952	0.000	-0.000	137.	5920.705	0.000	3053.722	15.350	-0.000	3752.952	0.000	-0.000
138.	5905.234	0.000	3046.978	16.200	-0.000	3751.193	0.000	-0.000	138.	5905.234	0.000	3046.978	16.200	-0.000	3751.193	0.000	-0.000
139.	5889.317	0.000	3040.340	17.040	-0.000	3749.389	0.000	-0.000	139.	5889.317	0.000	3040.340	17.040	-0.000	3749.389	0.000	-0.000
140.	5872.961	0.000	3033.855	17.820	-0.000	3747.539	0.000	-0.000	140.	5872.961	0.000	3033.855	17.820	-0.000	3747.539	0.000	-0.000
141.	5856.253	0.000	3027.470	18.570	-0.000	3745.646	0.000	-0.000	141.	5856.253	0.000	3027.470	18.570	-0.000	3745.646	0.000	-0.000
142.	5839.167	0.000	3021.169	19.240	-0.000	3743.714	0.000	-0.000	142.	5839.167	0.000	3021.169	19.240	-0.000	3743.714	0.000	-0.000
143.	5821.759	0.000	3014.940	19.860	-0.000	3741.747	0.000	-0.000	143.	5821.759	0.000	3014.940	19.860	-0.000	3741.747	0.000	-0.000
144.	5804.071	0.000	3008.769	20.420	-0.000	3739.747	0.000	-0.000	144.	5804.071	0.000	3008.769	20.420	-0.000	3739.747	0.000	-0.000
145.	5786.149	0.000	3002.610	20.930	-0.000	3737.714	0.000	-0.000	145.	5786.149	0.000	3002.610	20.930	-0.000	3737.714	0.000	-0.000
146.	5768.047	0.000	2996.450	21.390	-0.000	3735.647	0.000	-0.000	146.	5768.047	0.000	2996.450	21.390	-0.000	3735.647	0.000	-0.000
147.	5749.821	0.000	2990.282	21.800	-0.000	3733.549	0.000	-0.000	147.	5749.821	0.000	2990.282	21.800	-0.000	3733.549	0.000	-0.000
148.	5731.537	0.000	2984.105	22.160	-0.000	3731.420	0.000	-0.000	148.	5731.537	0.000	2984.105	22.160	-0.000	3731.420	0.000	-0.000
149.	5713.264	0.000	2977.914	22.480	-0.000	3729.260	0.000	-0.000	149.	5713.264	0.000	2977.914	22.480	-0.000	3729.260	0.000	-0.000

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ROME AIR DEVELOPMENT CENTER GRIFFISS AFB NY

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MICROWAVE ACOUSTICS HANDBOOK, VOLUME 4, BULK WAVE VELOCITIES-NU--ETC(U)

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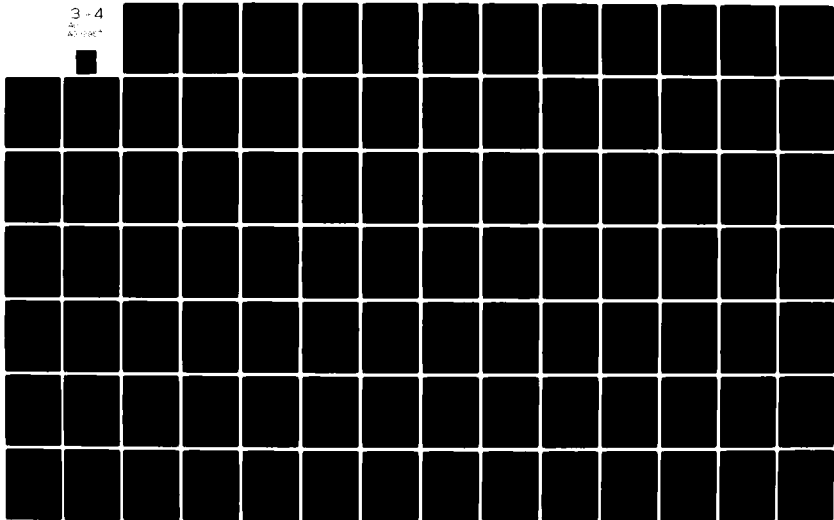
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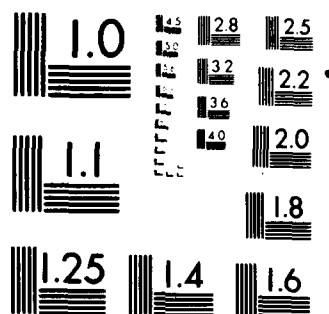
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963 A

	X-PLANE (YZ-PLANE) LITHIUM TANTALATE (SMITH AND WELSH)				BULK			
	LNGL	LNPH12	LNPH13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12
150.	5695.082	-10.330	0.000	3710.915	20.260	-0.000	3710.915	-3.630
151.	5677.074	-10.230	0.000	3734.894	20.210	0.000	3710.701	-3.550
152.	5655.336	-10.050	0.000	3750.870	20.040	0.000	3706.592	-4.120
153.	5641.966	-9.860	0.000	3782.704	19.760	0.000	3701.311	-4.310
154.	5625.076	-9.600	0.000	3806.244	19.370	0.000	3696.364	-4.460
155.	5608.781	-9.260	0.000	3829.351	18.860	0.000	3691.254	-4.600
156.	5593.207	-8.830	0.000	3851.846	18.230	0.000	3685.509	-4.750
157.	5578.486	-8.330	0.000	3873.567	17.470	0.000	3679.574	-4.860
158.	5564.756	-7.730	0.000	3894.339	16.560	0.000	3673.415	-5.020
159.	5552.156	-7.050	0.000	3913.985	15.560	0.000	3667.317	-5.140
160.	5540.636	-6.280	0.000	3932.320	14.410	0.000	3661.460	-5.270
161.	5530.933	-5.410	0.000	3949.132	13.120	0.000	3657.233	-5.360
162.	5522.590	-4.460	0.000	3964.405	11.700	0.000	3651.660	-5.490
163.	5515.937	-3.430	0.000	3977.886	10.160	0.000	3645.275	-5.600
164.	5511.093	-2.320	0.000	3989.253	8.510	0.000	3638.205	-5.700
165.	5508.161	-1.160	0.000	3998.612	6.770	0.000	3632.598	-5.790
166.	5507.224	.050	0.000	4005.779	4.940	0.000	3626.120	-5.880
167.	5508.338	1.280	0.000	4010.676	3.080	0.000	3619.554	-5.960
168.	5513.536	2.520	0.000	4013.252	1.150	0.000	3612.323	-6.040
169.	5516.817	3.750	0.000	4013.459	-.760	0.000	3606.219	-6.110
170.	5524.157	4.950	0.000	4011.399	-2.650	0.000	3599.455	-6.170
171.	5533.499	6.100	0.000	4007.025	-4.490	0.000	3592.840	-6.220
172.	5544.762	7.160	0.000	4000.436	-6.260	0.000	3585.700	-6.270
173.	5557.645	8.150	0.000	3991.714	-7.950	0.000	3578.504	-6.310
174.	5572.624	9.100	0.000	3981.031	-9.530	0.000	3571.301	-6.360
175.	5588.965	9.930	0.000	3968.462	-10.990	0.000	3563.019	-6.370
176.	5606.723	10.660	0.000	3956.173	-12.340	0.000	3556.066	-6.390
177.	5625.744	11.250	0.000	3938.316	-13.560	0.000	3551.110	-6.400
178.	5645.877	11.830	0.000	3921.057	-14.670	0.000	3544.160	-6.410
179.	5666.968	12.270	0.000	3902.551	-15.650	0.000	3537.225	-6.400
180.	5688.867	12.630	0.000	3882.959	-16.510	0.000	3530.313	-6.390

Y-PLANE (XZ-PLANE) LITHIUM TANTALATE (SMITH AND WELSH)

BULK

	LNQVEL	LPM112	LPM113	FSRVEL	FSPM112	FSPM113	SSRVEL	SSPM112	SSPM113
0.	5952.395	0.000	0.000	4211.571	0.000	0.000	3367.006	0.000	0.000
1.	5953.333	1.110	0.860	4210.373	-1.070	-1.010	3367.218	0.000	-0.300
2.	5956.135	2.200	1.710	4206.794	-3.710	-2.000	3367.614	0.510	-0.700
3.	5960.759	3.250	2.530	4200.079	-5.506	-2.540	3368.272	0.770	-1.100
4.	5967.138	4.250	3.330	4192.703	-7.220	-3.510	3369.132	1.020	-1.500
5.	5975.182	5.190	4.080	4182.363	-8.860	-4.818	3370.371	1.270	-1.900
6.	5984.783	6.060	4.790	4169.979	-10.400	-5.650	3371.606	1.520	-2.300
7.	5995.819	6.840	5.450	4155.608	-11.830	-6.430	3373.493	1.760	-2.700
8.	6008.150	7.538	6.050	4139.636	-13.150	-7.160	3375.429	2.000	-3.070
9.	6021.684	8.140	6.600	4121.981	-14.350	-7.820	3377.607	2.230	-3.440
10.	6036.196	8.670	7.090	4102.884	-15.430	-8.420	3380.021	2.460	-3.800
11.	6051.616	9.110	7.540	4082.506	-16.400	-8.960	3382.667	2.670	-4.150
12.	6067.789	9.470	7.930	4061.008	-17.250	-9.440	3385.534	2.880	-4.490
13.	6084.586	9.760	8.270	4038.550	-17.990	-9.860	3388.616	3.080	-4.830
14.	6101.003	9.960	8.570	4015.204	-18.630	-10.230	3391.902	3.270	-5.150
15.	6117.565	10.130	8.820	3991.361	-19.160	-10.540	3395.382	3.450	-5.460
16.	6133.524	10.230	9.030	3966.922	-19.600	-10.810	3399.043	3.610	-5.770
17.	6159.660	10.270	9.210	3942.106	-19.940	-11.020	3402.871	3.760	-6.060
18.	6173.883	10.260	9.350	3917.047	-20.190	-11.150	3406.851	3.900	-6.340
19.	6192.108	10.210	9.470	3891.871	-20.350	-11.330	3410.965	4.010	-6.600
20.	6210.250	10.110	9.550	3866.702	-20.420	-11.420	3415.192	4.100	-6.850
21.	6228.266	9.990	9.610	3841.560	-20.400	-11.460	3419.507	4.170	-7.080
22.	6246.088	9.830	9.640	3816.464	-20.290	-11.450	3423.983	4.210	-7.290
23.	6263.609	9.650	9.650	3792.431	-20.090	-11.500	3428.623	4.210	-7.490
24.	6280.830	9.440	9.620	3768.480	-19.790	-11.470	3432.667	4.160	-7.670
25.	6297.711	9.210	9.620	3745.135	-19.390	-11.420	3436.983	4.060	-7.830
26.	6314.189	8.960	9.580	3722.526	-18.860	-11.350	3441.164	3.890	-7.970
27.	6330.236	8.690	9.520	3700.794	-18.200	-11.260	3445.127	3.640	-8.100
28.	6345.824	8.410	9.450	3680.112	-17.360	-11.200	3448.763	3.260	-8.230
29.	6360.926	8.120	9.370	3660.659	-16.370	-11.130	3451.932	2.740	-8.330
30.	6375.514	7.830	9.270	3642.664	-15.120	-11.070	3454.453	2.020	-8.370
31.	6389.566	7.520	9.160	3626.392	-13.600	-11.030	3456.100	1.070	-8.400
32.	6403.112	7.210	9.040	3612.143	-11.770	-11.030	3456.607	-1.100	-8.400
33.	6416.083	6.890	8.920	3600.219	-9.640	-11.070	3456.701	-1.610	-8.300
34.	6428.492	6.570	8.780	3590.861	-7.300	-11.130	3456.165	-2.220	-8.000
35.	6440.332	6.250	8.640	3584.162	-4.920	-11.200	3455.925	-2.810	-7.600
36.	6451.599	5.940	8.480	3580.006	-2.720	-11.260	3454.111	-3.410	-7.000
37.	6462.293	5.620	8.330	3578.097	-0.840	-11.300	3451.932	-4.010	-6.310
38.	6472.413	5.300	8.160	3578.029	.660	-11.320	3449.709	-4.600	-5.510
39.	6481.964	4.950	7.990	3579.399	1.800	-11.310	3449.709	-5.110	-4.700
40.	6490.949	4.600	7.810	3581.053	2.650	-11.290	3449.709	-5.610	-3.900
41.	6499.377	4.300	7.630	3585.106	3.270	-11.250	3449.709	-6.100	-3.100
42.	6507.256	4.000	7.440	3588.947	3.720	-11.200	3449.709	-6.590	-2.300
43.	6514.595	3.790	7.250	3593.204	4.030	-11.140	3449.709	-7.080	-1.500
44.	6521.407	3.510	7.050	3597.753	4.250	-11.060	3449.709	-7.570	-0.700
45.	6527.789	3.240	6.850	3602.499	4.380	-10.980	3449.709	-8.060	0.100
46.	6533.582	2.970	6.650	3607.365	4.460	-10.840	3449.709	-8.550	0.900
47.	6538.814	2.710	6.450	3612.292	4.460	-10.770	3449.709	-9.040	1.700
48.	6543.058	2.460	6.240	3617.229	4.460	-10.660	3449.709	-9.530	2.500
49.	6546.051	2.230	6.030	3622.137	4.410	-10.530	3449.709	-10.020	3.300

Y-PLANE (XZ-PLANE) LITHIUM TANTALATE (SMITH AND WELSH)

BULK

	LMGVEL	LPMI12	LPMI13	FSRVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13
50.	6152.011	2.000	5.020	3626.980	4.340	-10.350	3355.994	-1.710	-0.650
51.	6155.557	1.740	5.606	3631.728	4.230	-10.240	3354.636	-0.950	-0.200
52.	6158.786	1.580	5.390	3636.353	4.110	-10.080	3354.053	-0.200	0.000
53.	6161.483	1.380	5.170	3640.833	3.960	-9.900	3354.219	0.520	0.410
54.	6163.903	1.200	4.960	3645.144	3.800	-9.720	3354.111	1.220	1.030
55.	6165.989	1.020	4.740	3649.268	3.620	-9.530	3354.701	1.690	1.310
56.	6167.761	0.860	4.520	3653.187	3.420	-9.330	3354.961	2.520	1.500
57.	6169.240	0.710	4.310	3656.883	3.210	-9.110	3361.857	3.130	1.500
58.	6170.445	0.570	4.100	3660.341	2.990	-8.890	3365.357	3.690	1.620
59.	6171.398	0.440	3.880	3663.546	2.750	-8.660	3369.427	4.220	2.000
60.	6172.119	0.330	3.670	3666.488	2.510	-8.430	3374.032	4.720	2.230
61.	6172.628	0.220	3.470	3669.151	2.250	-8.180	3379.136	5.180	2.410
62.	6172.944	0.120	3.260	3671.525	1.990	-7.930	3384.703	5.600	2.590
63.	6173.087	0.030	3.060	3673.599	1.720	-7.670	3390.699	5.960	2.700
64.	6173.074	-0.040	2.860	3675.365	1.460	-7.400	3397.087	6.330	2.810
65.	6172.923	-0.110	2.670	3676.813	1.150	-7.130	3403.832	6.640	2.910
66.	6172.653	-0.170	2.480	3677.936	0.860	-6.850	3410.899	6.910	2.970
67.	6172.279	-0.220	2.290	3678.726	0.560	-6.570	3418.256	7.160	3.020
68.	6171.817	-0.270	2.110	3679.183	0.250	-6.280	3425.869	7.370	3.050
69.	6171.282	-0.300	1.940	3679.246	-0.050	-5.990	3433.705	7.540	3.060
70.	6170.686	-0.330	1.770	3679.064	-0.360	-5.700	3441.734	7.690	3.050
71.	6170.046	-0.350	1.610	3678.483	-0.670	-5.400	3449.924	7.810	3.020
72.	6169.375	-0.360	1.450	3677.551	-0.950	-5.110	3458.240	7.900	2.950
73.	6168.680	-0.370	1.300	3676.268	-1.300	-4.810	3466.676	7.970	2.850
74.	6167.975	-0.360	1.160	3674.633	-1.620	-4.510	3475.181	8.010	2.690
75.	6167.260	-0.370	1.020	3672.647	-1.930	-4.210	3483.736	8.030	2.450
76.	6166.570	-0.370	0.890	3670.311	-2.240	-3.910	3492.322	8.020	2.230
77.	6165.886	-0.360	0.770	3667.829	-2.550	-3.610	3500.908	7.950	2.030
78.	6165.229	-0.340	0.660	3664.603	-2.860	-3.320	3509.474	7.860	1.830
79.	6164.601	-0.330	0.560	3661.237	-3.170	-3.020	3517.998	7.740	1.630
80.	6164.009	-0.300	0.460	3657.536	-3.470	-2.730	3526.459	7.590	1.430
81.	6163.450	-0.260	0.380	3653.505	-3.760	-2.440	3534.838	7.690	1.230
82.	6162.954	-0.260	0.300	3649.152	-4.050	-2.150	3543.115	7.570	1.030
83.	6162.500	-0.230	0.230	3644.482	-4.340	-1.870	3551.272	7.440	0.830
84.	6162.101	-0.200	0.170	3639.503	-4.620	-1.590	3559.291	7.290	0.630
85.	6161.757	-0.170	0.120	3634.224	-4.890	-1.310	3567.157	7.130	0.430
86.	6161.474	-0.140	0.070	3628.653	-5.150	-1.040	3574.854	6.950	0.230
87.	6161.251	-0.100	0.040	3622.800	-5.410	-0.770	3582.366	6.760	0.030
88.	6161.091	-0.070	0.020	3616.676	-5.660	-0.510	3589.678	6.560	0.000
89.	6160.994	-0.030	0.000	3610.289	-5.860	-0.300	3596.779	6.370	0.000
90.	6160.962	0.000	0.000	3603.653	-6.130	0.000	3603.653	6.130	0.000
91.	6160.994	0.030	0.000	3596.779	-6.370	0.270	3610.289	5.880	0.000
92.	6161.091	0.070	0.020	3589.678	-6.560	0.460	3616.676	5.660	0.000
93.	6161.251	0.100	0.040	3582.366	-6.760	0.710	3622.800	5.410	0.000
94.	6161.474	0.140	0.070	3574.854	-6.950	0.940	3628.653	5.150	0.000
95.	6161.757	0.170	0.120	3567.157	-7.130	1.150	3634.224	4.890	0.000
96.	6162.101	0.200	0.170	3559.291	-7.290	1.360	3639.503	4.620	0.000
97.	6162.500	0.230	0.230	3551.272	-7.440	1.560	3644.482	4.340	0.000
98.	6162.954	0.260	0.300	3543.115	-7.570	1.750	3649.152	4.050	0.000
99.	6163.450	0.280	0.380	3534.838	-7.690	1.920	3653.505	3.760	0.000

Y-PLANE (XZ-PLANE) LITHIUM TANTALATE (SMITH AND WELSH)

	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	.300	.460	3926.459	-7.790	2.090	3657.536	3.470	-2.730
101.	.330	.560	3517.998	-7.080	2.250	3661.237	3.170	-3.020
102.	.340	.660	3509.474	-7.950	2.390	3664.603	2.860	-3.320
103.	.360	.770	3508.906	-7.990	2.530	3667.629	2.550	-3.610
104.	.370	.890	3492.322	-8.020	2.650	3670.311	2.240	-3.910
105.	.370	1.020	3483.736	-8.030	2.750	3672.667	1.930	-4.210
106.	.360	1.160	3475.181	-8.010	2.840	3674.833	1.620	-4.510
107.	.370	1.300	3466.676	-7.970	2.920	3676.268	1.300	-4.810
108.	.360	1.450	3458.246	-7.900	3.020	3677.551	.990	-5.110
109.	.350	1.610	3449.924	-7.810	3.050	3678.463	.670	-5.440
110.	.330	1.770	3441.734	-7.690	3.060	3679.064	.360	-5.700
111.	.300	1.940	3433.705	-7.540	3.050	3679.296	.056	-5.990
112.	.270	2.110	3425.869	-7.370	3.020	3679.163	-.1250	-6.250
113.	.220	2.290	3418.256	-7.160	2.970	3678.728	-.560	-6.570
114.	.170	2.480	3410.899	-6.910	2.900	3677.936	-1.150	-6.890
115.	.110	2.670	3403.832	-6.640	2.800	3676.613	-1.730	-7.130
116.	.040	2.860	3397.887	-6.330	2.610	3675.365	-2.440	-7.450
117.	-.030	3.060	3390.699	-5.980	2.400	3673.896	-3.210	-7.670
118.	-.120	3.260	3384.703	-5.600	2.160	3671.525	-4.150	-7.830
119.	-.220	3.470	3379.136	-5.160	1.910	3669.151	-5.250	-8.100
120.	-.330	3.670	3374.032	-4.720	1.630	3666.666	-6.430	-8.430
121.	-.440	3.880	3369.427	-4.220	1.400	3663.946	-7.750	-8.800
122.	-.570	4.100	3365.357	-3.690	1.200	3660.341	-9.200	-9.250
123.	-.720	4.310	3361.857	-3.130	1.060	3656.803	-10.800	-9.710
124.	-.860	4.520	3358.961	-2.520	.910	3653.167	-12.550	-10.250
125.	-1.020	4.740	3356.781	-1.890	.730	3649.266	-14.450	-10.850
126.	-1.200	4.960	3355.111	-1.220	.510	3645.144	-16.500	-11.500
127.	-1.380	5.170	3354.219	-.520	.270	3640.833	-18.700	-12.200
128.	-1.560	5.390	3354.953	.200	.070	3636.353	-21.100	-12.900
129.	-1.760	5.600	3354.638	.950	-.280	3631.728	-23.600	-13.600
130.	-2.000	5.820	3355.994	1.710	-.850	3626.980	-26.200	-14.300
131.	-2.230	6.030	3356.137	2.480	-1.030	3622.137	-28.900	-15.050
132.	-2.460	6.240	3361.079	3.260	-1.420	3617.229	-31.700	-15.800
133.	-2.710	6.450	3364.823	4.040	-1.620	3612.292	-34.600	-16.500
134.	-2.970	6.650	3369.365	4.800	-2.230	3607.365	-37.500	-17.200
135.	-3.240	6.850	3374.689	5.530	-2.640	3602.499	-40.400	-17.900
136.	-3.510	7.050	3380.766	6.230	-3.060	3597.753	-43.300	-18.600
137.	-3.790	7.250	3387.947	6.860	-3.470	3593.004	-46.200	-19.300
138.	-4.060	7.440	3394.960	7.400	-3.850	3588.947	-49.100	-20.000
139.	-4.360	7.630	3402.980	7.920	-4.200	3585.108	-52.000	-20.700
140.	-4.600	7.810	3411.218	8.470	-4.710	3581.053	-54.900	-21.400
141.	-4.900	7.990	3419.709	8.100	-5.110	3579.399	-57.800	-22.100
142.	-5.380	8.168	3428.697	7.830	-5.510	3578.029	-60.700	-22.800
143.	-5.620	8.338	3436.833	7.200	-5.910	3576.977	-63.600	-23.500
144.	-5.940	8.480	3443.111	6.180	-6.310	3580.006	-66.500	-24.200
145.	-6.250	8.640	3448.925	4.810	-6.700	3584.162	-69.400	-24.900
146.	-6.570	8.780	3453.165	3.320	-7.060	3588.061	-72.300	-25.600
147.	-6.890	8.920	3455.701	1.610	-7.350	3590.219	-75.200	-26.300
148.	-7.210	9.068	3456.687	-.150	-7.650	3612.143	-78.100	-27.000
149.	-7.520	9.180	3456.100	-1.070	-7.840	3626.592	-81.000	-27.700

Y-PLANE (XZ-PLANE) LITHIUM TANTALATE (SMITH AND WELSH)										BULK	
	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13			
150.	-7.830	9.270	3654.453	-2.020	-7.970	3642.664	15.124	-11.000			
151.	-8.120	9.370	3651.932	-2.740	-6.030	3660.059	18.370	-11.130			
152.	-8.410	9.490	3648.765	-3.260	-6.030	3680.112	17.363	-11.200			
153.	-8.690	9.520	3645.127	-3.640	-7.590	3700.796	18.200	-11.200			
154.	-8.960	9.580	3641.164	-3.890	-7.510	3722.526	19.660	-11.300			
155.	-9.210	9.620	3636.983	-4.060	-7.790	3745.135	19.390	-11.420			
156.	-9.440	9.650	3632.667	-4.160	-7.650	3768.440	19.790	-11.470			
157.	-9.650	9.650	3628.283	-4.210	-7.480	3792.431	20.690	-11.500			
158.	-9.830	9.640	3623.883	-4.210	-7.290	3816.064	20.200	-11.500			
159.	-9.990	9.610	3619.587	-4.170	-7.000	3841.660	20.400	-11.400			
160.	-10.110	9.550	3615.192	-4.010	-6.600	3866.702	20.420	-11.420			
161.	-10.210	9.470	3610.965	-3.900	-6.340	3891.871	20.350	-11.330			
162.	-10.260	9.350	3606.851	-3.760	-6.060	3917.047	20.190	-11.190			
163.	-10.270	9.210	3602.871	-3.610	-5.770	3942.106	19.940	-11.020			
164.	-10.230	9.030	3599.043	-3.450	-5.470	3966.922	19.600	-10.810			
165.	-10.130	8.820	3595.362	-3.270	-5.150	3991.361	19.180	-10.540			
166.	-9.980	8.570	3591.902	-3.060	-4.830	4015.264	18.630	-10.230			
167.	-9.760	8.270	3588.616	-2.800	-4.490	4038.550	17.590	-9.880			
168.	-9.470	7.930	3585.534	-2.670	-4.150	4061.008	17.250	-9.500			
169.	-9.110	7.540	3582.667	-2.460	-3.800	4082.506	16.400	-9.090			
170.	-8.670	7.090	3580.021	-2.230	-3.440	4102.804	15.430	-8.620			
171.	-8.140	6.600	3577.607	-2.000	-3.070	4121.961	14.350	-8.100			
172.	-7.530	6.050	3575.429	-1.760	-2.700	4139.636	13.150	-7.500			
173.	-6.840	5.450	3573.493	-1.520	-2.330	4155.006	11.830	-6.830			
174.	-6.060	4.790	3571.806	-1.270	-1.950	4169.979	10.400	-6.050			
175.	-5.190	4.080	3570.371	-1.020	-1.560	4182.363	8.860	-5.010			
176.	-4.250	3.330	3569.192	-0.770	-1.170	4192.703	7.220	-3.910			
177.	-3.250	2.530	3568.272	-0.510	-0.780	4200.679	5.500	-2.700			
178.	-2.200	1.710	3567.614	-0.260	-0.390	4206.794	3.710	-2.000			
179.	-1.110	0.860	3567.216	0.000	0.000	4210.373	1.870	-1.010			
180.	0.000	-0.000	3567.066	0.000	0.000	4211.571	-0.000	0.000			

Z-PLANE (XY-PLANE) LITHIUM TANTALATE (SMITH AND WELSH)

BULK

	LMQEL	LPN12	LPN13	FSRUEL	FSPN12	FSPN13	SSRUEL	SSPN12	SSPN13
0.	5952.395	0.000	0.000	4211.571	0.000	0.000	3367.006	0.000	0.000
1.	5952.023	-0.510	-0.860	4210.774	-1.240	1.010	3367.374	0.390	0.390
2.	5954.103	1.000	-1.710	4208.394	-2.470	2.010	3360.241	1.120	0.700
3.	5956.212	1.460	-2.550	4204.493	-3.670	3.000	3360.662	1.660	1.100
4.	5959.117	1.940	-3.370	4198.995	-4.840	3.960	3371.627	2.240	1.700
5.	5962.772	2.370	-4.160	4192.873	-5.950	4.900	3374.280	2.790	1.940
6.	5967.121	2.750	-4.920	4183.757	-7.020	5.610	3377.427	3.330	2.310
7.	5972.090	3.100	-5.650	4174.129	-8.010	6.670	3381.131	3.660	2.600
8.	5977.631	3.400	-6.340	4163.279	-8.940	7.500	3385.303	4.300	3.000
9.	5983.641	3.650	-6.990	4151.310	-9.760	8.250	3390.171	4.880	3.390
10.	5990.046	3.860	-7.600	4138.328	-10.550	9.030	3395.443	5.370	3.710
11.	5996.762	4.010	-8.170	4124.448	-11.230	9.730	3401.302	5.660	4.060
12.	5983.706	4.110	-8.690	4189.789	-11.620	10.390	3407.609	6.200	4.300
13.	5918.791	4.160	-9.180	4094.474	-12.310	11.000	3414.379	6.690	4.600
14.	5917.937	4.170	-9.620	4078.630	-12.720	11.570	3421.583	7.070	4.950
15.	5925.864	4.130	-10.030	4062.389	-13.020	12.110	3424.147	7.420	5.220
16.	5932.096	4.050	-10.480	4045.646	-13.220	12.610	3437.147	7.710	5.460
17.	5938.960	3.930	-10.740	4029.261	-13.310	13.070	3445.412	7.990	5.600
18.	5945.569	3.770	-11.040	4012.659	-13.290	13.510	3453.920	8.130	5.860
19.	5951.928	3.570	-11.320	3996.236	-13.140	13.910	3462.597	8.220	6.050
20.	5957.894	3.350	-11.560	3980.153	-12.860	14.290	3471.354	8.230	6.150
21.	5963.456	3.090	-11.770	3964.586	-12.430	14.650	3480.663	8.130	6.300
22.	5968.564	2.810	-11.960	3949.724	-11.930	14.960	3488.656	7.900	6.390
23.	5973.170	2.510	-12.120	3935.773	-11.060	15.290	3496.929	7.530	6.440
24.	5977.237	2.190	-12.260	3922.953	-10.060	15.570	3504.724	6.990	6.470
25.	5980.734	1.850	-12.380	3911.582	-8.900	15.630	3511.650	6.260	6.400
26.	5983.632	1.500	-12.470	3901.665	-7.460	16.060	3518.096	5.340	6.460
27.	5985.985	1.130	-12.540	3893.688	-5.860	16.240	3523.253	4.220	6.440
28.	5987.544	0.760	-12.590	3887.797	-4.030	16.350	3527.111	2.930	6.410
29.	5988.536	0.360	-12.620	3884.175	-2.060	16.460	3529.502	1.500	6.300
30.	5988.867	-0.000	-12.630	3882.959	0.000	16.510	3530.313	-0.000	6.300
31.	5988.536	-0.360	-12.620	3884.179	2.060	16.480	3529.502	-1.500	6.390
32.	5987.548	-0.760	-12.590	3887.797	4.030	16.390	3527.111	-2.930	6.410
33.	5985.909	-1.130	-12.540	3893.686	5.860	16.240	3523.253	-4.220	6.400
34.	5983.632	-1.500	-12.470	3893.665	7.460	16.060	3518.096	-5.340	6.400
35.	5980.734	-1.850	-12.380	3911.582	8.900	15.630	3511.650	-6.260	6.400
36.	5977.237	-2.190	-12.260	3922.953	10.060	15.570	3504.724	-6.990	6.470
37.	5973.170	-2.510	-12.120	3935.773	11.060	15.290	3496.929	-7.530	6.440
38.	5968.564	-2.810	-11.960	3949.724	11.030	14.960	3488.656	-7.900	6.300
39.	5963.456	-3.090	-11.770	3964.586	12.430	14.650	3480.663	-8.130	6.300
40.	5957.894	-3.350	-11.560	3980.153	12.860	14.290	3471.354	-8.230	6.150
41.	5951.928	-3.570	-11.320	3996.236	13.140	13.910	3462.597	-8.220	6.050
42.	5945.569	-3.770	-11.040	4012.659	13.290	13.510	3453.920	-8.130	5.860
43.	5938.960	-3.930	-10.740	4029.261	13.310	13.070	3445.412	-7.990	5.600
44.	5932.096	-4.050	-10.480	4045.646	13.220	12.610	3437.147	-7.710	5.460
45.	5925.864	-4.130	-10.030	4062.389	13.020	12.110	3429.187	-7.420	5.220
46.	5917.937	-4.170	-9.620	4078.630	12.720	11.570	3421.583	-7.070	4.950
47.	5918.791	-4.160	-9.180	4094.474	12.310	11.000	3414.379	-6.690	4.600
48.	5983.706	-4.110	-8.690	4189.789	11.620	10.390	3407.609	-6.200	4.300
49.	5996.762	-4.010	-8.170	4124.448	11.230	9.730	3401.302	-5.660	4.060

Z-PLANE (XY-PLANE) LITHIUM TANTALATE (SMITH AND WELSH)									
BULK									
	LNVEL	LPN12	LPN13	FSRWEL	FSPN12	FSPN13	SSRWEL	SSPN12	SSPN13
50.	5590.846	-3.860	-7.600	4130.328	10.550	9.030	3395.483	-5.370	3.730
51.	5593.641	-3.650	-6.990	4151.310	9.760	6.250	3390.171	-4.660	3.030
52.	5577.631	-3.400	-6.340	4163.279	8.940	7.500	3385.333	-4.300	3.030
53.	5572.890	-3.100	-5.650	4174.129	8.010	6.670	3381.131	-3.860	2.660
54.	5567.121	-2.750	-4.920	4183.757	7.020	5.610	3377.427	-3.350	2.310
55.	5562.772	-2.370	-4.160	4192.073	5.950	4.900	3374.288	-2.790	1.940
56.	5559.117	-1.940	-3.370	4198.995	4.840	3.960	3371.697	-2.240	1.560
57.	5556.212	-1.480	-2.550	4204.453	3.670	3.000	3369.682	-1.660	1.170
58.	5554.103	-1.000	-1.710	4208.394	2.470	2.410	3368.241	-1.120	.760
59.	5552.823	-.510	-.860	4210.774	1.240	1.010	3367.374	-.560	.300
60.	5552.395	0.000	0.000	4211.571	0.000	0.000	3367.086	0.000	-.000
61.	5552.823	.510	.860	4210.774	-1.240	-1.010	3367.374	.560	-.300
62.	5554.103	1.000	1.710	4208.394	-2.470	-2.410	3368.241	1.120	-.760
63.	5556.212	1.480	2.550	4204.453	-3.670	-3.000	3369.682	1.660	-1.170
64.	5559.117	1.940	3.370	4198.995	-4.840	-3.960	3371.697	2.240	-1.560
65.	5562.772	2.370	4.160	4192.073	-5.950	-4.900	3374.288	2.790	-1.940
66.	5567.121	2.750	4.920	4183.757	-7.020	-5.610	3377.427	3.350	-2.310
67.	5572.890	3.100	5.650	4174.129	-8.010	-6.670	3381.131	3.860	-2.660
68.	5577.631	3.400	6.340	4163.279	-8.940	-7.500	3385.333	4.300	-3.030
69.	5583.641	3.650	6.990	4151.310	-9.760	-8.250	3390.171	4.660	-3.300
70.	5590.846	3.860	7.600	4130.328	-10.550	-9.030	3395.483	5.370	-3.730
71.	5596.762	4.010	8.170	4124.446	-11.236	-9.730	3401.302	5.640	-4.060
72.	5603.706	4.110	8.690	4108.789	-11.820	-10.350	3407.604	6.260	-4.310
73.	5610.751	4.160	9.180	4094.474	-12.310	-11.000	3414.379	6.890	-4.560
74.	5617.937	4.170	9.620	4078.630	-12.720	-11.570	3421.263	7.070	-4.800
75.	5625.064	4.130	10.030	4062.389	-13.020	-12.110	3429.187	7.420	-5.020
76.	5632.896	4.050	10.400	4045.886	-13.220	-12.610	3437.147	7.710	-5.260
77.	5638.960	3.930	10.740	4029.261	-13.310	-13.070	3445.412	7.950	-5.500
78.	5645.569	3.770	11.040	4012.659	-13.290	-13.510	3453.920	8.130	-5.740
79.	5651.920	3.570	11.320	3996.236	-13.160	-13.910	3462.597	8.220	-6.010
80.	5657.894	3.350	11.560	3980.153	-12.850	-14.290	3471.354	8.200	-6.240
81.	5663.456	3.090	11.770	3964.586	-12.430	-14.650	3480.083	8.130	-6.500
82.	5668.564	2.810	11.960	3949.724	-11.830	-14.960	3488.658	7.900	-6.750
83.	5673.170	2.510	12.120	3935.773	-11.060	-15.250	3496.925	7.530	-6.940
84.	5677.237	2.190	12.260	3922.953	-10.080	-15.570	3504.724	6.990	-7.070
85.	5680.734	1.850	12.380	3911.502	-9.900	-15.830	3511.950	6.260	-7.150
86.	5683.632	1.500	12.470	3901.665	-9.460	-16.060	3518.046	5.340	-7.180
87.	5685.909	1.130	12.540	3893.686	-8.860	-16.240	3523.253	4.220	-7.160
88.	5687.548	.760	12.590	3887.797	-8.030	-16.390	3527.111	2.930	-7.070
89.	5688.536	.380	12.620	3884.179	-7.060	-16.480	3529.502	1.500	-6.930
90.	5688.867	-0.000	12.630	3882.959	0.000	-16.510	3530.313	-0.000	-6.750
91.	5688.536	-.380	12.620	3884.179	7.060	-16.480	3529.502	-1.500	-6.510
92.	5687.548	-1.130	12.590	3887.797	8.860	-16.390	3527.111	-2.930	-6.240
93.	5685.909	-1.500	12.540	3893.686	9.460	-16.240	3523.253	-4.220	-6.010
94.	5683.632	-1.850	12.470	3901.665	9.800	-16.060	3518.046	-5.340	-5.740
95.	5680.734	-2.190	12.380	3911.502	10.080	-15.830	3511.950	-6.260	-5.500
96.	5677.237	-2.510	12.260	3922.953	11.060	-15.570	3504.724	-6.990	-5.260
97.	5673.170	-2.810	12.120	3935.773	11.830	-15.250	3496.925	-7.530	-5.020
98.	5668.564	-3.090	11.960	3949.724	11.060	-14.960	3488.658	-7.900	-4.800
99.	5663.456	-3.350	11.770	3964.586	11.430	-14.650	3480.083	-8.130	-4.560

Z-PLANE (XY-PLANE) LITHIUM TANTALATE (SMITH AND WELSH)

BULK

	LNQVEL	LPN12	LPN13	FSRVEL	FSPN12	FSPN13	SSRVEL	SSPN12	SSPN13
100.	5657.694	-3.350	11.560	3980.153	12.060	-14.290	3471.354	-6.230	-6.130
101.	5651.920	-3.570	11.320	3996.236	13.140	-13.910	3462.597	-8.220	-8.050
102.	5645.589	-3.770	11.040	4012.659	13.290	-13.510	3453.920	-8.130	-7.960
103.	5638.960	-3.930	10.760	4029.241	13.310	-13.070	3445.412	-7.950	-7.780
104.	5632.096	-4.050	10.480	4045.866	13.220	-12.610	3437.117	-7.710	-7.540
105.	5625.064	-4.130	10.030	4062.389	13.020	-12.110	3429.167	-7.420	-7.250
106.	5617.937	-4.178	9.620	4078.630	12.726	-11.578	3421.593	-7.078	-6.908
107.	5610.791	-4.168	9.180	4094.474	12.310	-11.000	3414.373	-6.650	-6.480
108.	5603.706	-4.110	8.690	4109.709	11.820	-10.390	3407.609	-6.260	-6.090
109.	5596.762	-4.010	8.170	4124.448	11.250	-9.730	3401.302	-5.840	-5.670
110.	5589.846	-3.868	7.600	4138.328	10.556	-9.030	3395.413	-5.370	-5.200
111.	5583.641	-3.650	6.990	4151.310	9.780	-8.290	3390.171	-4.860	-4.690
112.	5577.631	-3.400	6.340	4163.279	8.940	-7.500	3385.303	-4.360	-4.190
113.	5572.090	-3.100	5.650	4174.129	8.010	-6.670	3381.131	-3.860	-3.690
114.	5567.121	-2.750	4.920	4183.757	7.020	-5.810	3377.427	-3.330	-3.160
115.	5562.772	-2.370	4.160	4192.023	5.950	-4.900	3374.260	-2.798	-2.628
116.	5559.117	-1.940	3.370	4198.995	4.840	-3.960	3371.657	-2.240	-2.070
117.	5556.212	-1.460	2.550	4204.453	3.670	-3.000	3369.662	-1.680	-1.510
118.	5554.103	-1.000	1.710	4208.394	2.470	-2.010	3367.374	-1.128	-0.958
119.	5552.023	-0.510	0.860	4210.774	1.240	-1.010	3367.374	-0.560	-0.390
120.	5552.395	0.000	-0.000	4211.571	-0.000	0.000	3367.374	-0.000	0.000
121.	5552.023	0.510	-0.860	4213.774	-1.240	1.010	3367.374	-0.560	-0.390
122.	5554.103	1.000	-1.710	4208.394	-2.470	2.010	3367.374	-1.128	-0.958
123.	5556.212	1.460	-2.550	4204.453	-3.670	3.000	3369.662	-1.680	-1.510
124.	5559.117	1.940	-3.370	4198.995	-4.840	3.960	3371.657	-2.240	-2.070
125.	5562.772	2.370	-4.160	4192.023	-5.950	4.900	3374.260	-2.798	-2.628
126.	5567.121	2.750	-4.920	4183.757	-7.020	5.810	3377.427	-3.330	-3.160
127.	5572.090	3.100	-5.650	4174.129	-8.010	6.670	3381.131	-3.860	-3.690
128.	5577.631	3.400	-6.340	4163.279	-8.940	7.500	3385.303	-4.360	-4.190
129.	5583.641	3.650	-6.990	4151.310	-9.780	8.290	3390.171	-4.860	-4.690
130.	5589.846	3.868	-7.600	4138.328	-10.556	9.030	3395.413	-5.370	-5.200
131.	5596.762	4.010	-8.170	4124.448	-11.250	9.730	3401.302	-5.840	-5.670
132.	5603.706	4.110	-8.690	4109.709	-11.820	10.390	3407.609	-6.260	-6.090
133.	5610.791	4.168	-9.180	4094.474	-12.310	11.000	3414.373	-6.650	-6.480
134.	5617.937	4.178	-9.620	4078.630	-12.726	11.578	3421.593	-7.078	-6.908
135.	5625.064	4.130	-10.030	4062.389	-13.020	12.110	3429.167	-7.420	-7.250
136.	5632.096	4.050	-10.480	4045.866	-13.220	12.610	3437.117	-7.710	-7.540
137.	5638.960	3.930	-10.760	4029.241	-13.310	13.070	3445.412	-7.950	-7.780
138.	5645.589	3.770	-11.040	4012.659	-13.290	13.510	3453.920	-8.130	-7.960
139.	5651.920	3.570	-11.320	3996.236	-13.140	13.910	3462.597	-8.220	-8.050
140.	5657.694	3.350	-11.560	3980.153	-12.860	14.290	3471.354	-8.230	-8.060
141.	5663.450	3.090	-11.770	3964.586	-12.430	14.650	3480.083	-8.130	-7.960
142.	5668.564	2.810	-11.960	3949.724	-11.830	14.960	3488.656	-7.900	-7.730
143.	5673.170	2.510	-12.120	3935.773	-11.060	15.290	3496.929	-7.530	-7.360
144.	5677.237	2.190	-12.260	3922.933	-10.060	15.570	3504.724	-6.990	-6.820
145.	5680.734	1.850	-12.300	3911.502	-8.900	15.830	3511.850	-6.260	-6.090
146.	5683.632	1.500	-12.470	3901.665	-7.460	16.060	3518.094	-5.360	-5.190
147.	5685.909	1.130	-12.540	3893.666	-5.860	16.240	3523.233	-4.220	-4.050
148.	5687.546	.760	-12.590	3887.797	-4.030	16.390	3527.111	-2.930	-2.760
149.	5688.536	.380	-12.620	3884.179	-2.060	16.480	3529.502	-1.500	-1.330

Z-PLANE (XY-PLANE) LITHIUM TANTALATE (SMITH AND WELSH)										BULK	
	LNQWEL	LPN112	LPN113	FSRWEL	FSPN112	FSPN113	SSRWEL	SSPN112	SSPN113		
158.	5688.867	0.000	-12.630	3882.959	0.000	16.510	3530.313	-0.000	0.330		
151.	5688.536	-3.320	-12.620	3884.179	2.060	16.460	3529.502	-1.500	6.330		
152.	5687.548	-1.760	-12.590	3887.797	4.030	16.390	3527.111	-2.930	0.410		
153.	5685.909	-1.130	-12.540	3893.606	5.860	16.240	3523.253	-4.220	0.440		
154.	5683.632	-1.500	-12.470	3901.665	7.480	16.060	3518.096	-5.340	0.400		
155.	5680.734	-1.850	-12.380	3911.502	8.900	15.830	3511.650	-6.260	0.400		
156.	5677.237	-2.150	-12.260	3922.953	10.060	15.570	3504.724	-6.930	0.410		
157.	5673.170	-2.510	-12.120	3935.773	11.060	15.290	3496.929	-7.530	0.440		
158.	5668.564	-2.810	-11.960	3949.724	11.830	14.980	3488.658	-7.900	0.390		
159.	5663.458	-3.090	-11.770	3964.586	12.430	14.650	3480.003	-8.130	6.300		
160.	5657.894	-3.350	-11.560	3980.153	12.660	14.290	3471.354	-8.230	6.110		
161.	5651.920	-3.570	-11.320	3996.236	13.140	13.910	3462.537	-8.220	6.040		
162.	5645.585	-3.770	-11.040	4012.659	13.290	13.510	3453.720	-8.130	2.880		
163.	5638.960	-3.930	-10.740	4029.261	13.310	13.070	3445.412	-7.950	5.600		
164.	5632.096	-4.050	-10.400	4045.866	13.220	12.610	3437.147	-7.710	5.480		
165.	5625.864	-4.130	-10.030	4062.369	13.020	12.110	3429.187	-7.420	5.220		
166.	5617.937	-4.170	-9.620	4078.630	12.720	11.570	3421.583	-7.070	4.940		
167.	5610.791	-4.160	-9.180	4094.474	12.310	11.000	3414.379	-6.690	4.610		
168.	5603.786	-4.110	-8.690	4099.789	11.820	10.350	3407.604	-6.260	4.370		
169.	5596.762	-4.010	-8.170	4124.448	11.230	9.730	3401.382	-5.840	4.080		
170.	5590.046	-3.860	-7.600	4138.326	10.550	9.030	3395.483	-5.370	3.730		
171.	5583.641	-3.650	-6.990	4151.310	9.760	8.290	3390.171	-4.880	3.390		
172.	5577.631	-3.400	-6.340	4163.279	8.940	7.500	3385.383	-4.360	3.040		
173.	5572.096	-3.100	-5.650	4174.129	8.010	6.670	3381.131	-3.800	2.600		
174.	5567.121	-2.750	-4.920	4183.797	7.020	5.610	3377.427	-3.330	2.310		
175.	5562.772	-2.370	-4.160	4192.073	5.950	4.500	3374.260	-2.790	1.940		
176.	5559.117	-1.940	-3.370	4198.995	4.840	3.960	3371.697	-2.240	1.560		
177.	5556.212	-1.460	-2.550	4204.453	3.670	3.000	3369.682	-1.660	1.170		
178.	5554.183	-1.000	-1.710	4208.394	2.470	2.010	3368.241	-1.120	0.700		
179.	5552.823	-0.510	-0.860	4210.774	1.240	1.010	3367.374	-0.560	0.330		
180.	5552.395	0.000	0.000	4211.571	-0.000	-0.000	3367.086	0.000	-0.000		

X-PLANE (YZ-PLANE) LITHIUM TANTALATE (WARNER ET AL)									
	LNVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
0.	5721.678	12.450	0.000	3821.167	-16.090	-0.000	3533.160	-6.750	0.000
1.	5743.961	12.670	0.000	3801.610	-16.660	-0.000	3525.866	-6.760	0.000
2.	5766.720	12.830	0.000	3781.505	-17.130	-0.000	3510.578	-6.760	0.000
3.	5789.700	12.920	0.000	3760.940	-17.500	-0.000	3491.303	-6.760	0.000
4.	5813.053	12.960	0.000	3740.158	-17.780	-0.000	3468.053	-6.750	0.000
5.	5836.438	12.940	0.000	3719.156	-17.970	-0.000	3496.834	-6.730	0.000
6.	5859.838	12.860	0.000	3690.087	-18.060	-0.000	3489.657	-6.700	0.000
7.	5883.166	12.770	0.000	3677.055	-18.100	-0.000	3482.530	-6.660	0.000
8.	5906.339	12.610	0.000	3656.161	-18.050	-0.000	3475.463	-6.620	0.000
9.	5929.281	12.430	0.000	3635.499	-17.920	-0.000	3468.464	-6.560	0.000
10.	5951.921	12.200	0.000	3615.159	-17.710	-0.000	3461.542	-6.500	0.000
11.	5974.195	11.950	0.000	3595.223	-17.440	-0.000	3454.707	-6.420	0.000
12.	5996.844	11.670	0.000	3575.770	-17.090	-0.000	3447.967	-6.340	0.000
13.	6017.414	11.370	0.000	3556.871	-16.680	-0.000	3441.330	-6.250	0.000
14.	6038.255	11.040	0.000	3538.594	-16.200	-0.000	3434.807	-6.150	0.000
15.	6058.522	10.690	0.000	3521.000	-15.660	-0.000	3428.405	-6.050	0.000
16.	6078.176	10.330	0.000	3504.116	-15.070	-0.000	3422.132	-5.930	0.000
17.	6097.180	9.950	0.000	3488.084	-14.420	-0.000	3415.998	-5.810	0.000
18.	6115.503	9.560	0.000	3472.859	-13.710	-0.000	3410.010	-5.670	0.000
19.	6133.115	9.150	0.000	3458.513	-12.960	-0.000	3404.177	-5.530	0.000
20.	6149.993	8.740	0.000	3445.080	-12.170	-0.000	3398.506	-5.390	0.000
21.	6166.116	8.320	0.000	3432.593	-11.330	-0.000	3393.005	-5.250	0.000
22.	6181.464	7.890	0.000	3421.077	-10.460	-0.000	3387.682	-5.080	0.000
23.	6196.025	7.460	0.000	3410.552	-9.560	-0.000	3382.544	-4.860	0.000
24.	6209.785	7.030	0.000	3401.035	-8.630	-0.000	3377.596	-4.740	0.000
25.	6222.737	6.590	0.000	3392.535	-7.680	-0.000	3372.851	-4.510	0.000
26.	6234.874	6.150	0.000	3385.080	-6.720	-0.000	3368.310	-4.320	0.000
27.	6246.194	5.720	0.000	3378.609	-5.750	-0.000	3363.941	-4.110	0.000
28.	6256.695	5.260	0.000	3373.180	-4.780	-0.000	3359.680	-3.900	0.000
29.	6266.380	4.850	0.000	3368.785	-3.810	-0.000	3355.593	-3.650	0.000
30.	6275.253	4.420	0.000	3365.351	-2.840	-0.000	3352.325	-3.460	0.000
31.	6283.321	4.000	0.000	3362.922	-1.970	-0.000	3348.912	-3.240	0.000
32.	6290.592	3.560	0.000	3361.456	-0.960	-0.000	3345.719	-3.000	0.000
33.	6297.079	3.160	0.000	3360.929	-0.060	-0.000	3342.780	-2.760	0.000
34.	6302.793	2.780	0.000	3361.314	0.810	-0.000	3340.090	-2.520	0.000
35.	6307.750	2.380	0.000	3362.578	1.650	-0.000	3337.651	-2.270	0.000
36.	6311.968	2.000	0.000	3364.687	2.460	-0.000	3335.459	-2.020	0.000
37.	6315.465	1.630	0.000	3367.602	3.220	-0.000	3333.565	-1.770	0.000
38.	6318.261	1.270	0.000	3371.283	3.940	-0.000	3331.884	-1.510	0.000
39.	6320.379	0.930	0.000	3375.688	4.610	-0.000	3330.486	-1.250	0.000
40.	6321.844	0.590	0.000	3380.771	5.240	-0.000	3329.355	-0.980	0.000
41.	6322.679	0.270	0.000	3386.485	5.810	-0.000	3328.451	-0.720	0.000
42.	6322.912	-0.030	0.000	3392.782	6.330	-0.000	3327.837	-0.450	0.000
43.	6322.571	-0.320	0.000	3399.611	6.800	-0.000	3327.573	-0.190	0.000
44.	6321.684	-0.600	0.000	3406.920	7.220	-0.000	3327.519	0.080	0.000
45.	6320.283	-0.860	0.000	3414.659	7.560	-0.000	3327.736	0.350	0.000
46.	6318.397	-1.100	0.000	3422.773	7.860	-0.000	3328.223	0.610	0.000
47.	6316.059	-1.330	0.000	3431.211	8.150	-0.000	3328.979	0.860	0.000
48.	6313.302	-1.540	0.000	3439.918	8.360	-0.000	3330.004	1.140	0.000
49.	6310.159	-1.730	-0.000	3448.841	8.520	-0.000	3331.296	1.400	0.000

X-PLANE (YZ-PLANE) LITHIUM TANTALATE (MARNER ET AL)

BULK

	LSPH12	LSPH13	FSPH12	FSPH13	SSPH12	SSPH13
50.	6305.663	-0.000	3487.926	0.620	3332.653	-0.000
51.	6302.849	-0.000	3487.126	0.680	3334.673	-0.000
52.	6298.750	-0.000	3476.383	0.650	3336.793	-0.000
53.	6294.402	-0.000	3465.649	0.650	3339.090	-0.000
54.	6289.837	-0.000	3454.874	0.570	3341.681	-0.000
55.	6285.091	-0.000	3504.010	0.440	3344.522	-0.000
56.	6280.197	-0.000	3513.009	0.270	3347.606	-0.000
57.	6275.118	-0.000	3521.827	0.070	3350.936	-0.000
58.	6270.097	-0.000	3530.421	0.000	3354.501	-0.000
59.	6264.954	-0.000	3538.748	0.000	3358.290	-0.000
60.	6259.791	-0.000	3546.769	0.000	3362.320	-0.000
61.	6254.637	-0.000	3554.447	0.000	3366.563	-0.000
62.	6249.521	-0.000	3561.747	0.000	3371.021	-0.000
63.	6244.466	-0.000	3568.637	0.000	3375.687	-0.000
64.	6239.586	-0.000	3575.086	0.000	3380.525	-0.000
65.	6234.656	-0.000	3581.067	0.000	3385.617	-0.000
66.	6229.942	-0.000	3586.555	0.000	3390.868	-0.000
67.	6225.383	-0.000	3591.528	0.000	3396.299	-0.000
68.	6220.996	-0.000	3595.966	0.000	3401.903	-0.000
69.	6216.803	-0.000	3599.853	0.000	3407.673	-0.000
70.	6212.812	-0.000	3603.175	0.000	3413.600	-0.000
71.	6209.056	-0.000	3605.921	0.000	3419.677	-0.000
72.	6205.466	-0.000	3608.053	0.000	3425.896	-0.000
73.	6202.170	-0.000	3609.653	0.000	3432.247	-0.000
74.	6198.093	-0.000	3610.631	0.000	3438.724	-0.000
75.	6194.259	-0.000	3611.014	0.000	3445.316	-0.000
76.	6190.668	-0.000	3610.805	0.000	3452.016	-0.000
77.	6187.321	-0.000	3610.009	0.000	3458.815	-0.000
78.	6184.214	-0.000	3608.633	0.000	3465.703	-0.000
79.	6181.343	-0.000	3606.605	0.000	3472.672	-0.000
80.	6178.702	-0.000	3604.177	0.000	3479.713	-0.000
81.	6176.262	-0.000	3601.122	0.000	3486.816	-0.000
82.	6173.973	-0.000	3597.536	0.000	3493.976	-0.000
83.	6171.864	-0.000	3593.435	0.000	3501.179	-0.000
84.	6169.922	-0.000	3588.829	0.000	3508.418	-0.000
85.	6168.154	-0.000	3583.767	0.000	3515.684	-0.000
86.	6166.562	-0.000	3578.243	0.000	3522.968	-0.000
87.	6179.752	-0.000	3572.209	0.000	3530.261	-0.000
88.	6179.525	-0.000	3565.931	0.000	3537.554	-0.000
89.	6179.403	-0.000	3559.133	0.000	3544.838	-0.000
90.	6179.367	-0.000	3552.105	0.000	3552.105	-0.000
91.	6179.356	-0.000	3544.633	0.000	3559.345	-0.000
92.	6179.471	-0.000	3536.968	0.000	3566.550	-0.000
93.	6179.570	-0.000	3529.020	0.000	3573.712	-0.000
94.	6179.672	-0.000	3520.820	0.000	3580.822	-0.000
95.	6179.756	-0.000	3512.421	0.000	3587.872	-0.000
96.	6179.796	-0.000	3503.856	0.000	3594.853	-0.000
97.	6179.775	-0.000	3495.159	0.000	3601.757	-0.000
98.	6179.660	-0.000	3486.364	0.000	3608.577	-0.000
99.	6179.453	-0.000	3477.508	0.000	3615.365	-0.000

X-PLANE (YZ-PLANE) LITHIUM TANTALATE (WARNER ET AL)										BULK	
	LNVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13		
100.	6179.107	-1.220	0.000	3468.626	-8.350	-0.000	3621.933	5.940	-0.000		
101.	6178.689	-1.310	0.000	3459.756	-8.340	-0.000	3620.453	5.830	-0.000		
102.	6177.937	-1.410	0.000	3450.936	-8.300	-0.000	3634.059	5.710	-0.000		
103.	6177.067	-1.520	0.000	3442.205	-8.220	-0.000	3641.142	5.590	-0.000		
104.	6175.979	-1.640	0.000	3433.600	-8.100	-0.000	3647.297	5.460	-0.000		
105.	6174.651	-1.770	0.000	3425.163	-7.940	-0.000	3653.315	5.330	-0.000		
106.	6173.061	-1.920	0.000	3416.933	-7.750	-0.000	3659.192	5.190	-0.000		
107.	6171.190	-1.070	0.000	3408.950	-7.510	-0.000	3664.919	5.050	-0.000		
108.	6169.016	-1.240	0.000	3401.257	-7.230	-0.000	3670.491	4.900	-0.000		
109.	6166.521	-1.420	0.000	3393.894	-6.880	-0.000	3675.902	4.750	-0.000		
110.	6163.684	-1.600	0.000	3386.904	-6.550	-0.000	3681.145	4.590	-0.000		
111.	6160.486	-1.800	0.000	3380.327	-6.170	-0.000	3686.216	4.430	-0.000		
112.	6156.911	-2.010	0.000	3374.205	-5.700	-0.000	3691.109	4.260	-0.000		
113.	6152.939	-2.230	0.000	3368.581	-5.210	-0.000	3695.818	4.090	-0.000		
114.	6148.555	-2.450	0.000	3363.494	-4.660	-0.000	3700.336	3.920	-0.000		
115.	6143.743	-2.650	0.000	3358.947	-4.100	-0.000	3704.666	3.740	-0.000		
116.	6138.487	-2.930	0.000	3355.100	-3.440	-0.000	3708.795	3.560	-0.000		
117.	6132.773	-3.160	0.000	3351.870	-2.630	-0.000	3712.722	3.380	-0.000		
118.	6126.589	-3.440	0.000	3349.338	-2.130	-0.000	3716.443	3.190	-0.000		
119.	6119.921	-3.700	0.000	3347.540	-1.390	-0.000	3719.953	3.000	-0.000		
120.	6112.756	-3.970	0.000	3346.512	-6.20	-0.000	3723.250	2.810	-0.000		
121.	6105.092	-4.250	0.000	3346.267	1.00	-0.000	3726.329	2.610	-0.000		
122.	6096.912	-4.530	0.000	3346.098	1.026	-0.000	3729.187	2.420	-0.000		
123.	6088.212	-4.820	0.000	3346.375	1.680	-0.000	3731.822	2.220	-0.000		
124.	6078.985	-5.110	0.000	3350.745	2.770	-0.000	3734.230	2.020	-0.000		
125.	6069.227	-5.410	0.000	3354.032	3.670	-0.000	3736.409	1.810	-0.000		
126.	6058.935	-5.700	0.000	3358.259	4.550	-0.000	3738.358	1.610	-0.000		
127.	6048.107	-6.000	0.000	3363.444	5.526	-0.000	3740.073	1.400	-0.000		
128.	6036.745	-6.300	0.000	3369.602	6.450	-0.000	3741.554	1.200	-0.000		
129.	6024.849	-6.600	0.000	3376.745	7.360	-0.000	3742.798	.990	-0.000		
130.	6012.425	-6.650	0.000	3384.880	8.310	-0.000	3743.604	.780	-0.000		
131.	5999.479	-7.190	0.000	3404.137	9.236	-0.000	3744.572	.570	-0.000		
132.	5986.019	-7.460	0.000	3415.252	10.140	-0.000	3745.100	.360	-0.000		
133.	5972.056	-7.760	0.000	3427.345	11.020	-0.000	3745.386	.150	-0.000		
134.	5957.604	-8.040	0.000	3440.402	11.670	-0.000	3745.436	-.660	-0.000		
135.	5942.679	-8.310	0.000	3454.402	12.700	-0.000	3745.243	-.270	-0.000		
136.	5927.300	-8.570	0.000	3469.318	13.490	-0.000	3744.810	-.480	-0.000		
137.	5911.490	-8.830	0.000	3485.120	14.240	-0.000	3743.226	-.690	-0.000		
138.	5895.272	-9.060	0.000	3501.770	15.600	-0.000	3742.076	-1.110	-0.000		
139.	5878.678	-9.260	0.000	3519.224	16.206	-0.000	3740.690	-1.320	-0.000		
140.	5861.738	-9.490	0.000	3537.435	16.740	-0.000	3739.064	-1.530	-0.000		
141.	5844.489	-9.670	0.000	3556.346	17.220	-0.000	3737.212	-1.730	-0.000		
142.	5826.974	-9.840	0.000	3575.895	17.640	-0.000	3735.124	-1.940	-0.000		
143.	5809.235	-9.960	0.000	3596.014	17.990	-0.000	3732.806	-2.140	-0.000		
144.	5791.325	-10.160	0.000	3616.628	18.270	-0.000	3730.261	-2.340	-0.000		
145.	5773.298	-10.210	0.000	3637.655	18.476	-0.000	3727.491	-2.540	-0.000		
146.	5755.215	-10.210	0.000	3659.006	18.590	-0.000	3724.500	-2.730	-0.000		
147.	5737.143	-10.210	0.000	3680.585	18.630	-0.000	3721.269	-2.930	-0.000		
148.	5718.134	-10.160	0.000	3702.287	18.590	-0.000	3717.863	-3.120	-0.000		
149.	5701.328	-10.100	0.000								

X-PLANE (YZ-PLANE) LITHIUM TANTALATE (WARNER ET AL)

BULK

	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
150.	5603.749	0.000	3724.003	18.450	-0.000	3714.226	-3.300	0.000
151.	5666.511	0.000	3745.614	18.220	0.000	3710.380	-3.443	0.000
152.	5649.712	0.000	3766.996	17.890	0.000	3700.331	-3.670	0.000
153.	5633.458	0.000	3788.016	17.460	0.000	3702.882	-3.650	0.000
154.	5617.861	0.000	3808.536	16.920	0.000	3697.637	-4.020	0.000
155.	5603.036	0.000	3828.412	16.270	0.000	3693.003	-4.260	0.000
156.	5589.112	0.000	3847.497	15.510	0.000	3688.182	-4.360	0.000
157.	5576.208	0.000	3865.638	14.640	0.000	3683.182	-4.530	0.000
158.	5564.455	0.000	3882.884	13.640	0.000	3678.006	-4.650	0.000
159.	5553.979	0.000	3898.483	12.530	0.000	3672.861	-4.840	0.000
160.	5544.907	0.000	3912.607	11.310	0.000	3667.152	-4.990	0.000
161.	5537.358	0.000	3925.754	9.960	0.000	3661.866	-5.140	0.000
162.	5531.441	0.000	3936.952	8.540	0.000	3655.668	-5.260	0.000
163.	5527.256	0.000	3946.365	7.020	0.000	3649.705	-5.410	0.000
164.	5524.886	0.000	3953.890	5.420	0.000	3643.604	-5.540	0.000
165.	5524.394	0.000	3959.447	3.770	0.000	3637.371	-5.660	0.000
166.	5525.825	0.000	3962.977	2.070	0.000	3631.013	-5.780	0.000
167.	5529.199	0.000	3964.445	.360	0.000	3624.538	-5.900	0.000
168.	5534.513	0.000	3963.844	-1.350	0.000	3617.952	-6.000	0.000
169.	5541.738	0.000	3961.191	-3.040	0.000	3611.263	-6.100	0.000
170.	5550.825	0.000	3956.527	-4.680	0.000	3604.478	-6.200	0.000
171.	5561.702	0.000	3949.916	-6.250	0.000	3597.607	-6.260	0.000
172.	5574.280	0.000	3941.446	-7.750	0.000	3590.655	-6.360	0.000
173.	5588.452	0.000	3931.221	-9.160	0.000	3583.632	-6.440	0.000
174.	5604.101	0.000	3919.352	-10.460	0.000	3576.545	-6.500	0.000
175.	5621.101	0.000	3905.969	-11.680	0.000	3569.403	-6.560	0.000
176.	5639.319	0.000	3891.286	-12.760	0.000	3562.214	-6.610	0.000
177.	5658.620	0.000	3875.203	-13.770	0.000	3554.986	-6.660	0.000
178.	5678.870	0.000	3856.102	-14.650	0.000	3547.729	-6.700	0.000
179.	5699.932	0.000	3840.043	-15.420	0.000	3540.451	-6.720	0.000
180.	5721.676	0.000	3821.167	-16.090	0.000	3533.160	-6.750	0.000

Y-PLANE (XZ-PLANE) LITHIUM TANTALATE (WARMER ET AL)

BULK

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	5592.421	0.000	0.000	4171.619	0.000	0.000	3330.096	0.000	0.000
1.	5593.283	.960	.830	4170.771	-1.650	-1.950	3338.251	.300	-1.420
2.	5595.700	1.910	1.650	4167.639	-3.260	-1.900	3338.710	.600	-1.020
3.	5599.760	2.840	2.450	4162.457	-4.870	-2.620	3339.474	.900	-1.210
4.	5605.372	3.720	3.220	4155.241	-6.410	-3.710	3340.541	1.200	-1.090
5.	5612.466	4.560	3.980	4146.166	-7.890	-4.570	3341.094	1.490	-2.110
6.	5620.960	5.340	4.670	4135.266	-9.280	-5.360	3343.574	1.760	-2.510
7.	5630.757	6.050	5.330	4122.625	-10.600	-6.150	3345.533	2.060	-2.920
8.	5641.752	6.690	5.940	4108.361	-11.020	-6.660	3347.781	2.340	-3.320
9.	5653.834	7.270	6.500	4092.660	-12.940	-7.520	3350.314	2.620	-3.710
10.	5666.890	7.770	7.020	4075.590	-13.970	-8.130	3353.125	2.880	-4.090
11.	5680.803	8.210	7.480	4057.316	-14.900	-8.660	3356.216	3.140	-4.460
12.	5695.459	8.560	7.900	4037.940	-15.740	-9.170	3359.552	3.390	-4.830
13.	5710.746	8.860	8.280	4017.624	-16.480	-9.620	3363.154	3.630	-5.190
14.	5726.560	9.120	8.610	3996.469	-17.130	-10.010	3367.002	3.860	-5.530
15.	5742.795	9.300	8.890	3974.661	-17.700	-10.350	3371.088	4.080	-5.860
16.	5759.354	9.430	9.140	3952.262	-18.170	-10.640	3375.396	4.290	-6.180
17.	5776.146	9.510	9.360	3929.412	-18.570	-10.890	3379.923	4.490	-6.490
18.	5793.090	9.540	9.530	3906.222	-18.860	-11.090	3384.653	4.670	-6.770
19.	5810.104	9.530	9.680	3882.803	-19.120	-11.260	3389.561	4.830	-7.040
20.	5827.115	9.440	9.800	3859.260	-19.290	-11.350	3394.644	4.960	-7.300
21.	5844.056	9.400	9.890	3835.632	-19.360	-11.450	3399.890	5.110	-7.540
22.	5860.871	9.290	9.950	3811.116	-19.400	-11.540	3405.294	5.220	-7.760
23.	5877.500	9.150	9.990	3785.873	-19.340	-11.580	3410.728	5.300	-7.960
24.	5893.895	8.960	10.010	3760.805	-19.210	-11.590	3416.291	5.360	-8.130
25.	5910.010	8.800	10.010	3743.095	-19.010	-11.560	3421.986	5.360	-8.290
26.	5925.806	8.590	9.990	3720.836	-18.720	-11.550	3427.535	5.370	-8.410
27.	5941.245	8.370	9.950	3699.125	-18.340	-11.510	3433.131	5.340	-8.500
28.	5956.297	8.130	9.900	3678.068	-17.860	-11.460	3438.832	5.170	-8.590
29.	5970.933	7.880	9.840	3657.719	-17.270	-11.420	3443.956	4.960	-8.670
30.	5985.130	7.620	9.760	3638.437	-16.520	-11.360	3448.996	4.600	-8.730
31.	5998.865	7.350	9.660	3620.202	-15.570	-11.370	3453.593	4.090	-8.830
32.	6012.122	7.070	9.560	3603.334	-14.340	-11.400	3457.524	3.320	-8.920
33.	6024.885	6.790	9.440	3588.173	-12.750	-11.460	3460.477	2.210	-7.960
34.	6037.144	6.500	9.320	3575.155	-10.680	-11.630	3462.025	.650	-7.610
35.	6048.809	6.210	9.180	3564.820	-8.190	-11.610	3461.615	-1.300	-7.110
36.	6060.113	5.920	9.030	3557.562	-5.200	-11.980	3459.017	-3.680	-6.710
37.	6070.812	5.630	8.880	3553.480	-2.300	-12.090	3453.966	-5.630	-6.290
38.	6080.984	5.330	8.720	3552.223	-.040	-12.100	3446.866	-7.460	-5.740
39.	6090.630	5.040	8.550	3553.165	1.680	-12.030	3438.403	-8.500	-5.070
40.	6099.750	4.760	8.380	3555.666	2.860	-11.930	3429.150	-8.500	-4.360
41.	6108.350	4.470	8.200	3559.224	3.640	-11.800	3419.631	-9.060	-3.560
42.	6116.434	4.190	8.010	3563.470	4.140	-11.660	3410.201	-8.680	-4.790
43.	6124.010	3.920	7.810	3568.157	4.450	-11.520	3401.099	-8.510	-4.460
44.	6131.066	3.650	7.620	3573.112	4.630	-11.370	3392.482	-8.010	-4.110
45.	6137.672	3.390	7.410	3578.215	4.710	-11.220	3384.454	-7.440	-3.840
46.	6143.780	3.130	7.210	3583.376	4.720	-11.060	3377.083	-6.880	-3.510
47.	6149.422	2.890	7.000	3588.531	4.690	-10.900	3370.412	-6.120	-3.170
48.	6154.618	2.650	6.780	3593.627	4.610	-10.720	3364.470	-5.420	-2.840
49.	6159.361	2.420	6.560	3598.623	4.490	-10.560	3359.269	-4.710	-2.530

Y-PLANE (XZ-PLANE) LITHIUM TANTALATE (WARNER ET AL)

	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
50.	6183.688	6.340	3603.486	4.350	-10.360	3354.817	-3.960	-2.110
51.	6187.684	6.120	3608.184	4.190	-10.150	3351.110	-3.260	-1.040
52.	6171.136	5.090	3612.695	4.006	-9.950	3348.143	-2.550	-1.210
53.	6176.294	5.670	3616.995	3.800	-9.760	3345.304	-1.840	-1.250
54.	6177.894	5.440	3621.065	3.580	-9.560	3344.376	-1.150	-0.930
55.	6179.557	5.210	3624.887	3.340	-9.340	3343.548	-0.460	-0.610
56.	6181.701	4.960	3628.445	3.090	-9.110	3343.393	.170	-0.330
57.	6183.543	4.760	3631.724	2.830	-8.870	3343.691	.800	-0.070
58.	6185.104	4.530	3634.710	2.560	-8.620	3345.019	1.410	.180
59.	6186.460	4.300	3637.393	2.260	-8.370	3346.752	1.910	.420
60.	6187.452	4.070	3639.761	1.990	-8.110	3349.064	2.540	.690
61.	6188.277	3.850	3641.803	1.690	-7.850	3351.927	3.060	.930
62.	6188.893	3.630	3643.512	1.390	-7.560	3355.314	3.560	1.030
63.	6189.319	3.410	3644.880	1.060	-7.300	3359.197	4.020	1.110
64.	6189.573	3.200	3645.900	.760	-7.030	3363.546	4.460	1.150
65.	6189.670	2.980	3646.566	.440	-6.740	3368.337	4.860	1.160
66.	6189.629	2.780	3646.874	.110	-6.460	3373.536	5.230	1.150
67.	6189.465	2.570	3646.820	-.210	-6.170	3379.116	5.610	1.170
68.	6189.193	2.370	3646.401	-.540	-5.860	3385.049	5.900	1.160
69.	6188.830	2.160	3645.617	-.870	-5.520	3391.306	6.170	1.050
70.	6188.390	1.990	3644.467	-1.200	-5.250	3397.859	6.440	1.000
71.	6187.886	1.810	3642.951	-1.530	-5.000	3404.680	6.670	1.000
72.	6187.331	1.640	3641.071	-1.660	-4.760	3411.743	6.870	1.000
73.	6186.736	1.470	3638.829	-2.160	-4.410	3419.020	7.050	1.000
74.	6186.118	1.310	3636.229	-2.510	-4.120	3426.485	7.200	1.000
75.	6185.483	1.160	3633.274	-2.830	-3.830	3434.112	7.320	1.000
76.	6184.842	1.020	3629.972	-3.140	-3.540	3441.875	7.420	1.000
77.	6184.206	.880	3626.327	-3.450	-3.250	3449.751	7.500	1.000
78.	6183.583	.750	3622.346	-3.750	-2.970	3457.714	7.550	1.000
79.	6182.981	.640	3618.036	-4.050	-2.650	3465.742	7.580	1.000
80.	6182.407	.530	3613.412	-4.340	-2.420	3473.811	7.590	1.000
81.	6181.869	.430	3608.477	-4.620	-2.150	3481.898	7.580	1.000
82.	6181.371	.340	3603.244	-4.890	-1.890	3489.982	7.550	1.000
83.	6180.920	.260	3597.723	-5.150	-1.630	3498.042	7.500	1.000
84.	6180.520	.190	3591.926	-5.400	-1.370	3506.057	7.430	1.000
85.	6180.174	.130	3585.866	-5.650	-1.130	3514.010	7.350	.910
86.	6179.887	.090	3579.557	-5.860	-.890	3521.870	7.250	.750
87.	6179.661	.050	3573.011	-6.100	-.650	3529.631	7.130	.500
88.	6179.498	.020	3566.244	-6.300	-.430	3537.286	7.000	.410
89.	6179.408	.030	3559.270	-6.490	-.230	3544.766	6.850	.210
90.	6179.367	0.000	3552.105	-6.670	0.000	3552.105	6.670	0.000
91.	6179.400	.030	3544.766	-6.850	.210	3559.270	6.490	-.230
92.	6179.498	.020	3537.268	-7.000	.410	3566.244	6.300	-.430
93.	6179.661	.050	3529.631	-7.130	.580	3573.011	6.100	-.650
94.	6179.887	.100	3521.870	-7.250	.750	3579.557	5.860	-.890
95.	6180.174	.130	3514.010	-7.350	.910	3585.866	5.600	-1.130
96.	6180.520	.190	3506.057	-7.430	1.070	3591.926	5.400	-1.370
97.	6180.920	.260	3498.042	-7.500	1.210	3597.723	5.150	-1.630
98.	6181.371	.340	3489.982	-7.550	1.340	3603.546	4.890	-1.890
99.	6181.869	.430	3481.898	-7.580	1.460	3608.477	4.620	-2.150

Y-PLANE (XZ-PLANE) LITHIUM TANTALATE (WARNER ET AL)

BULK

	LNQVEL	LPM112	LPM113	FSPVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
100.	6102.407	.300	.530	3473.011	-7.590	1.570	3613.412	4.340	-2.420
101.	6102.901	.310	.640	3465.742	-7.580	1.660	3618.036	4.050	-2.050
102.	6103.503	.330	.750	3457.714	-7.550	1.750	3622.366	3.750	-2.470
103.	6104.206	.340	.880	3449.751	-7.500	1.820	3626.327	3.450	-3.220
104.	6104.842	.340	1.020	3441.075	-7.420	1.870	3629.972	3.150	-3.540
105.	6105.483	.340	1.160	3434.112	-7.320	1.910	3633.274	2.850	-3.830
106.	6106.116	.330	1.310	3426.485	-7.200	1.940	3636.229	2.510	-4.120
107.	6106.736	.320	1.470	3419.020	-7.050	1.950	3638.829	2.180	-4.410
108.	6107.331	.310	1.640	3411.743	-6.870	1.950	3641.071	1.850	-4.700
109.	6107.886	.260	1.810	3404.680	-6.670	1.930	3642.951	1.530	-5.000
110.	6108.390	.250	1.990	3397.859	-6.440	1.900	3644.467	1.200	-5.290
111.	6108.830	.210	2.180	3391.306	-6.170	1.850	3645.617	.870	-5.560
112.	6109.193	.170	2.370	3385.045	-5.900	1.780	3646.401	.540	-5.800
113.	6109.465	.120	2.570	3379.116	-5.610	1.710	3646.828	.210	-6.170
114.	6109.629	.060	2.780	3373.536	-5.230	1.600	3646.874	-.110	-6.460
115.	6109.670	-.010	2.980	3368.337	-4.860	1.480	3646.566	-.440	-6.740
116.	6109.573	-.090	3.200	3363.546	-4.460	1.350	3645.900	-.760	-7.030
117.	6109.315	-.160	3.410	3359.197	-4.020	1.190	3644.080	-1.060	-7.300
118.	6108.893	-.270	3.630	3355.314	-3.560	1.030	3641.512	-1.340	-7.550
119.	6108.277	-.340	3.850	3351.927	-3.060	.840	3641.803	-1.600	-7.850
120.	6107.452	-.500	4.070	3349.064	-2.540	.640	3639.761	-1.840	-8.110
121.	6106.400	-.620	4.300	3346.752	-1.990	.420	3637.393	-2.200	-8.370
122.	6105.104	-.760	4.530	3345.019	-1.410	.180	3634.710	-2.560	-8.620
123.	6103.543	-.900	4.760	3343.891	-.800	-.070	3631.724	-2.830	-8.870
124.	6101.781	-1.060	4.980	3343.393	-.170	-.330	3628.445	-3.050	-9.110
125.	6179.557	-1.220	5.210	3343.548	.460	-.610	3624.667	-3.340	-9.340
126.	6177.094	-1.400	5.440	3344.376	1.150	-.800	3621.055	-3.540	-9.560
127.	6174.294	-1.580	5.670	3345.904	1.840	-1.200	3616.935	-3.600	-9.760
128.	6171.136	-1.780	5.890	3348.143	2.550	-1.510	3612.695	-4.000	-9.990
129.	6167.608	-1.960	6.120	3351.110	3.260	-1.640	3608.184	-4.150	-10.190
130.	6163.688	-2.150	6.340	3354.017	3.960	-1.780	3603.466	-4.350	-10.370
131.	6159.361	-2.420	6.560	3359.269	4.710	-1.900	3598.623	-4.490	-10.560
132.	6154.610	-2.650	6.780	3364.470	5.420	-2.040	3593.627	-4.610	-10.730
133.	6149.422	-2.890	7.000	3370.412	6.120	-2.170	3588.581	-4.690	-10.900
134.	6143.780	-3.130	7.210	3377.003	6.800	-2.310	3583.376	-4.720	-11.060
135.	6137.672	-3.350	7.410	3384.454	7.440	-2.440	3578.215	-4.710	-11.220
136.	6131.086	-3.650	7.620	3392.482	8.010	-2.560	3573.112	-4.630	-11.370
137.	6124.010	-3.920	7.810	3401.099	8.510	-2.680	3568.157	-4.450	-11.520
138.	6116.434	-4.190	8.010	3410.201	8.800	-2.780	3563.470	-4.140	-11.660
139.	6108.350	-4.470	8.200	3419.631	9.060	-2.860	3558.224	-3.640	-11.800
140.	6099.750	-4.760	8.380	3429.150	8.900	-2.930	3553.666	-2.880	-11.930
141.	6090.630	-5.040	8.550	3438.403	8.500	-2.980	3549.165	-1.680	-12.030
142.	6080.984	-5.330	8.720	3446.886	7.480	-2.940	3544.223	.040	-12.100
143.	6070.812	-5.630	8.880	3453.966	5.630	-2.800	3538.490	2.300	-12.070
144.	6060.113	-5.920	9.030	3459.017	3.680	-2.610	3532.562	5.200	-11.900
145.	6048.889	-6.210	9.180	3461.675	1.300	-2.310	3526.820	8.100	-11.810
146.	6037.144	-6.500	9.320	3462.025	-.650	-1.980	3521.185	10.680	-11.630
147.	6024.885	-6.790	9.440	3460.477	-2.210	-1.680	3516.173	12.750	-11.460
148.	6012.122	-7.070	9.568	3457.524	-3.320	-1.250	3510.334	14.340	-11.400
149.	5998.865	-7.350	9.660	3453.593	-4.090	-.840	3504.202	15.570	-11.370

Y-PLANE (XZ-PLANE) LITHIUM TANTALATE (WARNER ET AL)

BULK

	LNQVEL	LPHI12	LPHI13	FSRWEL	FSPHI12	FSPHI13	SSRWEL	SSPHI12	SSPHI13
150.	5985.130	-7.620	9.760	3448.996	-4.600	-8.530	3638.437	18.520	-11.380
151.	5970.933	-7.880	9.840	3443.958	-4.950	-8.570	3657.789	17.270	-11.420
152.	5956.297	-8.130	9.900	3438.632	-5.170	-8.560	3676.068	16.660	-11.460
153.	5941.245	-8.370	9.950	3433.131	-5.300	-8.500	3694.125	16.340	-11.510
154.	5925.806	-8.540	9.990	3427.535	-5.376	-8.410	3720.038	16.720	-11.550
155.	5910.010	-8.800	10.010	3421.906	-5.380	-8.250	3743.049	16.010	-11.590
156.	5893.895	-8.960	10.010	3416.291	-5.360	-8.130	3766.804	14.210	-11.500
157.	5877.580	-9.150	9.990	3410.726	-5.300	-7.960	3786.873	13.340	-11.500
158.	5860.871	-9.290	9.950	3405.249	-5.220	-7.760	3812.196	12.400	-11.500
159.	5844.056	-9.400	9.890	3399.880	-5.110	-7.540	3835.692	11.380	-11.490
160.	5827.115	-9.460	9.800	3394.644	-4.960	-7.300	3859.260	10.290	-11.390
161.	5810.104	-9.530	9.680	3389.561	-4.830	-7.040	3882.003	19.120	-11.260
162.	5793.090	-9.540	9.530	3384.649	-4.670	-6.770	3906.222	18.080	-11.000
163.	5776.148	-9.510	9.360	3379.923	-4.490	-6.480	3929.412	16.570	-10.890
164.	5759.354	-9.430	9.140	3375.396	-4.250	-6.160	3952.262	15.170	-10.640
165.	5742.795	-9.300	8.890	3371.086	-4.060	-5.860	3974.661	17.700	-10.350
166.	5726.560	-9.120	8.610	3367.002	-3.860	-5.530	3996.489	17.130	-10.010
167.	5710.748	-8.860	8.280	3363.154	-3.630	-5.150	4017.624	16.480	-9.620
168.	5695.459	-8.580	7.900	3359.552	-3.390	-4.830	4037.940	15.740	-9.110
169.	5680.803	-8.210	7.480	3356.206	-3.140	-4.470	4057.306	14.900	-8.600
170.	5666.890	-7.770	7.020	3353.125	-2.860	-4.050	4075.590	13.970	-8.130
171.	5653.834	-7.270	6.500	3350.314	-2.620	-3.710	4092.660	12.940	-7.520
172.	5641.752	-6.640	5.940	3347.781	-2.340	-3.320	4108.381	11.820	-6.860
173.	5638.757	-6.050	5.330	3345.533	-2.060	-2.920	4122.825	10.600	-6.150
174.	5620.960	-5.340	4.670	3343.574	-1.780	-2.510	4135.266	9.280	-5.300
175.	5612.466	-4.560	3.960	3341.909	-1.490	-2.100	4146.106	7.690	-4.510
176.	5605.372	-3.720	3.220	3340.541	-1.200	-1.690	4155.281	6.410	-3.710
177.	5599.760	-2.840	2.450	3339.474	-900	-1.270	4162.457	4.670	-2.620
178.	5595.700	-1.910	1.650	3338.710	-600	-0.850	4167.634	3.200	-1.500
179.	5593.243	-0.560	0.530	3338.251	-300	-0.420	4174.771	1.620	-0.920
180.	5592.421	0.000	-0.000	3338.096	0.000	0.000	4171.615	-0.000	0.000

Z-PLANE (XY-PLANE) LITHIUM TANTALATE (WARNER ET AL)

BULK

	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
0.	5592.421	0.000	0.000	4171.019	0.000	0.000	3336.096	0.000	0.000
1.	5592.622	.470	-.330	4171.020	-1.260	.950	3336.424	.540	.420
2.	5594.021	.930	-1.650	4168.629	-2.500	1.960	3334.402	1.260	.620
3.	5595.996	1.360	-2.460	4184.669	-3.730	2.930	3341.030	1.920	1.270
4.	5598.722	1.810	-3.250	4159.178	-4.910	3.750	3343.305	2.550	1.690
5.	5602.152	2.210	-4.020	4152.286	-6.060	4.640	3346.225	3.160	2.100
6.	5606.235	2.570	-4.760	4143.816	-7.150	5.490	3349.785	3.790	2.500
7.	5610.913	2.900	-5.470	4134.082	-8.190	6.320	3353.977	4.400	2.900
8.	5616.117	3.180	-6.140	4123.088	-9.150	7.110	3358.796	5.000	3.290
9.	5621.776	3.420	-6.780	4110.926	-10.050	7.860	3364.230	5.580	3.660
10.	5627.614	3.610	-7.360	4097.699	-10.870	8.570	3370.269	6.150	4.040
11.	5633.612	3.760	-7.940	4083.507	-11.610	9.240	3376.996	6.690	4.400
12.	5640.711	3.860	-8.460	4068.464	-12.260	9.870	3384.098	7.220	4.770
13.	5647.412	3.920	-8.950	4052.681	-12.830	10.460	3391.050	7.710	5.070
14.	5654.178	3.930	-9.390	4036.279	-13.310	11.010	3400.127	8.160	5.340
15.	5660.932	3.890	-9.800	4019.380	-13.700	11.530	3408.096	8.610	5.610
16.	5667.683	3.820	-10.170	4002.106	-14.000	12.010	3416.036	9.000	5.870
17.	5674.121	3.710	-10.510	3984.596	-14.190	12.460	3427.752	9.320	6.100
18.	5680.421	3.560	-10.820	3966.983	-14.260	12.860	3437.732	9.590	6.390
19.	5686.463	3.380	-11.100	3949.414	-14.240	13.260	3447.590	9.760	6.590
20.	5692.138	3.170	-11.350	3932.051	-14.070	13.650	3456.436	9.870	6.740
21.	5697.430	2.930	-11.560	3915.066	-13.760	14.010	3464.960	9.900	6.860
22.	5702.296	2.670	-11.760	3898.657	-13.270	14.340	3473.427	9.740	6.930
23.	5706.698	2.300	-11.920	3883.047	-12.560	14.670	3481.666	9.380	7.000
24.	5710.572	2.080	-12.070	3868.489	-11.660	14.970	3489.472	8.870	7.000
25.	5713.910	1.760	-12.180	3855.276	-10.470	15.260	3496.593	8.070	6.990
26.	5716.677	1.420	-12.280	3843.736	-8.970	15.520	3503.737	7.010	6.940
27.	5718.852	1.080	-12.350	3834.223	-7.140	15.760	3510.576	5.640	6.800
28.	5720.416	.720	-12.410	3827.095	-4.960	15.930	3516.761	3.970	6.600
29.	5721.363	.360	-12.440	3822.669	-2.570	16.050	3522.046	2.060	6.460
30.	5721.678	-.000	-12.450	3821.167	0.000	16.090	3526.960	0.000	6.300
31.	5721.363	-.360	-12.440	3822.669	2.570	16.050	3531.160	-2.060	6.100
32.	5720.416	-.720	-12.410	3827.095	4.960	15.930	3535.781	-3.970	6.010
33.	5718.852	-1.080	-12.350	3834.223	7.140	15.760	3539.876	-5.640	6.080
34.	5716.677	-1.420	-12.280	3843.736	8.970	15.520	3543.576	-7.010	6.340
35.	5713.910	-1.760	-12.180	3855.276	10.470	15.260	3546.737	-8.070	6.990
36.	5710.572	-2.080	-12.070	3868.489	11.660	14.970	3549.472	-8.870	7.000
37.	5706.698	-2.360	-11.920	3883.047	12.560	14.670	3551.666	-9.380	6.990
38.	5702.298	-2.670	-11.760	3898.657	13.270	14.340	3553.427	-9.740	6.950
39.	5697.430	-2.930	-11.560	3915.066	13.700	14.010	3554.960	-9.870	6.860
40.	5692.130	-3.170	-11.350	3932.051	14.070	13.650	3556.436	-9.900	6.740
41.	5686.463	-3.360	-11.100	3949.414	14.240	13.260	3557.990	-9.760	6.590
42.	5680.421	-3.560	-10.820	3966.983	14.260	12.860	3559.472	-9.590	6.390
43.	5674.121	-3.710	-10.510	3984.596	14.190	12.460	3560.732	-9.320	6.100
44.	5667.683	-3.820	-10.170	4002.106	14.000	12.010	3561.752	-8.950	5.940
45.	5660.932	-3.890	-9.800	4019.380	13.700	11.530	3562.696	-8.610	5.610
46.	5654.178	-3.930	-9.390	4036.279	13.310	11.010	3563.427	-8.160	5.340
47.	5647.412	-3.920	-8.950	4052.681	12.830	10.460	3564.096	-7.710	5.070
48.	5640.711	-3.860	-8.460	4068.464	12.260	9.870	3564.598	-7.220	4.770
49.	5634.152	-3.760	-7.940	4083.507	11.610	9.240	3564.996	-6.690	4.400

Z-PLANE (XY-PLANE) LITHIUM TANTALATE (WARNER ET AL)

BULK

	LNVEL	LPHI12	LPHI13	FSRWEL	FSPH12	FSPH13	SSRWEL	SSPH12	SSPH13
50.	5027.814	-3.610	-7.380	4097.699	10.870	8.570	3370.269	-6.150	4.000
51.	5021.776	-3.420	-6.780	4110.926	10.050	7.860	3364.230	-5.580	3.680
52.	5016.117	-3.180	-6.140	4123.086	9.150	7.110	3350.796	-5.000	3.200
53.	5010.913	-2.900	-5.470	4134.062	8.190	6.320	3333.977	-4.400	2.700
54.	5006.235	-2.570	-4.760	4143.816	7.150	5.440	3314.765	-3.740	2.200
55.	5002.152	-2.210	-4.020	4152.206	6.060	4.640	3304.225	-3.180	1.690
56.	5008.722	-1.810	-3.250	4159.178	4.910	3.750	3343.305	-2.550	1.270
57.	5005.996	-1.360	-2.460	4164.669	3.730	2.630	3341.030	-1.920	0.800
58.	5004.021	-0.930	-1.650	4168.629	2.500	1.900	3339.402	-1.260	0.300
59.	5002.822	-0.470	-0.830	4171.020	1.260	0.500	3338.424	-0.640	-0.200
60.	5002.621	0.000	0.000	4171.819	0.000	0.000	3338.098	0.000	-0.600
61.	5002.822	-0.470	-0.830	4171.020	-1.260	-0.500	3338.424	-0.640	-0.200
62.	5004.021	-0.930	-1.650	4168.629	-2.500	-1.900	3339.402	-1.260	-0.600
63.	5005.996	-1.360	-2.460	4164.669	-3.730	-2.630	3341.030	-1.920	-0.800
64.	5008.722	-1.810	-3.250	4159.178	-4.910	-3.750	3343.305	-2.550	-1.270
65.	5010.913	-2.210	-4.020	4152.206	-6.060	-4.640	3304.225	-3.180	-1.690
66.	5016.117	-2.570	-4.760	4143.816	-7.150	-5.440	3314.765	-3.740	-2.200
67.	5021.776	-2.900	-5.470	4134.062	-8.190	-6.320	3333.977	-4.400	-2.700
68.	5027.814	-3.180	-6.140	4123.086	-9.150	-7.110	3350.796	-5.000	-3.200
69.	5034.152	-3.420	-6.780	4110.926	-10.050	-7.860	3364.230	-5.580	-3.680
70.	5040.711	-3.610	-7.380	4097.699	-10.870	-8.570	3370.269	-6.150	-4.000
71.	5047.412	-3.760	-7.940	4083.507	-11.610	-9.240	3376.090	-6.650	-4.400
72.	5054.176	-3.860	-8.460	4068.464	-12.260	-9.670	3384.098	-7.220	-4.700
73.	5060.932	-3.920	-8.950	4052.681	-12.830	-10.460	3391.850	-7.710	-5.000
74.	5067.603	-3.930	-9.390	4036.279	-13.310	-11.010	3400.127	-8.160	-5.300
75.	5074.121	-3.820	-9.800	4019.360	-13.700	-11.530	3406.096	-8.590	-5.600
76.	5080.421	-3.710	-10.170	4002.108	-14.000	-12.010	3416.121	-8.990	-5.900
77.	5086.443	-3.560	-10.510	3984.596	-14.190	-12.460	3427.752	-9.320	-6.180
78.	5092.130	-3.360	-10.820	3966.983	-14.260	-12.660	3437.732	-9.590	-6.330
79.	5097.430	-3.170	-11.100	3949.414	-14.240	-13.260	3447.590	-9.760	-6.500
80.	5102.298	-2.930	-11.350	3932.051	-14.070	-13.650	3458.436	-9.860	-6.700
81.	5106.590	-2.670	-11.560	3915.066	-13.760	-14.010	3468.560	-9.890	-6.800
82.	5110.572	-2.380	-11.760	3898.657	-13.270	-14.340	3479.427	-9.700	-6.800
83.	5114.363	-2.060	-11.920	3883.047	-12.560	-14.670	3489.666	-9.360	-6.700
84.	5118.052	-1.760	-12.070	3868.489	-11.660	-14.970	3499.472	-8.800	-6.500
85.	5121.776	-1.420	-12.180	3855.276	-10.470	-15.260	3508.593	-8.100	-6.300
86.	5125.410	-1.080	-12.280	3843.736	-8.970	-15.520	3516.737	-7.610	-6.000
87.	5129.052	-0.720	-12.350	3834.223	-7.140	-15.750	3523.578	-6.640	-5.600
88.	5132.653	-0.360	-12.410	3827.095	-4.960	-15.930	3529.701	-5.500	-5.100
89.	5136.187	-0.000	-12.440	3822.669	-2.570	-16.050	3532.046	-4.200	-4.500
90.	5139.677	-0.360	-12.440	3822.669	0.000	-16.050	3533.160	-2.000	-3.800
91.	5143.110	-0.720	-12.410	3827.095	2.570	-16.050	3532.046	-0.000	-3.000
92.	5146.577	-1.080	-12.350	3834.223	4.960	-15.520	3526.761	-3.570	-2.200
93.	5149.952	-1.420	-12.280	3843.736	7.140	-15.750	3516.737	-5.640	-1.300
94.	5153.263	-1.760	-12.180	3855.276	8.970	-15.930	3508.593	-7.610	-0.300
95.	5156.590	-2.060	-12.070	3868.489	10.470	-15.260	3499.472	-8.100	0.300
96.	5159.852	-2.380	-11.920	3883.047	11.660	-14.670	3489.666	-8.650	0.800
97.	5163.047	-2.670	-11.760	3898.657	12.560	-14.340	3479.427	-9.360	1.200
98.	5166.296	-2.930	-11.560	3915.066	13.270	-14.010	3468.560	-9.760	1.500
99.	5169.430	-3.170	-11.350	3932.051	13.760	-13.760	3458.436	-9.860	1.600

Z-PLANE (XY-PLANE) LITHIUM TANTALATE (WARNER ET AL)

BULK

	LNGVEL	LPM12	LPM13	FSPVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
100.	5692.130	-3.170	11.350	3932.051	14.070	-13.650	3450.436	-9.670	-6.740
101.	5686.443	-3.360	11.180	3949.414	14.240	-13.260	3447.990	-9.700	-6.500
102.	5680.621	-3.560	10.920	3966.983	14.280	-12.660	3437.732	-9.590	-6.350
103.	5674.121	-3.710	10.510	3984.596	14.190	-12.460	3427.752	-9.320	-6.180
104.	5667.883	-3.820	10.170	4002.108	14.080	-12.610	3416.121	-8.990	-5.940
105.	5660.932	-3.950	9.800	4019.380	13.700	-11.530	3406.096	-8.610	-5.670
106.	5654.176	-3.930	9.390	4036.279	13.310	-11.010	3400.127	-8.100	-5.300
107.	5647.412	-3.920	8.950	4052.681	12.830	-10.460	3391.650	-7.710	-5.010
108.	5640.711	-3.860	8.460	4068.464	12.260	-9.870	3384.098	-7.220	-4.740
109.	5634.152	-3.760	7.940	4083.587	11.610	-9.240	3376.696	-6.690	-4.400
110.	5627.814	-3.610	7.380	4097.699	10.870	-8.570	3370.269	-6.150	-4.050
111.	5621.776	-3.420	6.780	4110.928	10.050	-7.860	3364.230	-5.500	-3.600
112.	5616.117	-3.160	6.140	4123.086	9.150	-7.110	3358.796	-5.000	-3.290
113.	5610.913	-2.900	5.470	4134.082	8.190	-6.320	3353.977	-4.400	-2.900
114.	5606.235	-2.570	4.760	4143.816	7.150	-5.490	3349.745	-3.790	-2.580
115.	5602.152	-2.210	4.020	4152.206	6.060	-4.640	3346.225	-3.180	-2.210
116.	5598.722	-1.810	3.250	4159.178	4.910	-3.750	3343.305	-2.550	-1.890
117.	5595.998	-1.380	2.460	4164.669	3.730	-2.830	3341.030	-1.920	-1.520
118.	5594.021	-0.930	1.650	4168.629	2.500	-1.900	3339.402	-1.260	-1.150
119.	5592.621	-0.470	0.830	4171.020	1.260	-0.950	3338.094	-0.640	-0.780
120.	5592.421	0.000	0.000	4171.020	-0.000	0.000	3338.094	0.000	-0.000
121.	5592.022	-0.470	-0.830	4171.020	-1.260	-0.950	3338.094	-0.640	-0.780
122.	5594.021	1.380	-1.650	4168.629	-2.500	1.900	3339.402	1.260	-1.150
123.	5595.998	1.360	-2.460	4164.669	-3.730	2.830	3341.030	1.920	-1.520
124.	5598.722	1.810	-3.250	4159.178	-4.910	3.750	3343.305	2.550	-1.890
125.	5602.152	2.210	-4.020	4152.206	-6.060	4.640	3346.225	3.180	-2.210
126.	5606.235	2.570	-4.760	4143.816	-7.150	5.490	3349.745	3.790	-2.580
127.	5610.913	2.900	-5.470	4134.082	-8.190	6.320	3353.977	4.400	-2.900
128.	5616.117	3.160	-6.140	4123.086	-9.150	7.110	3358.796	5.000	-3.290
129.	5621.776	3.420	-6.780	4110.928	-10.050	7.860	3364.230	5.500	-3.600
130.	5627.814	3.610	-7.380	4097.699	-10.870	8.570	3370.269	6.150	-4.050
131.	5634.152	3.760	-7.940	4083.587	-11.610	9.240	3376.696	6.690	-4.400
132.	5640.711	3.860	-8.460	4068.464	-12.260	9.870	3384.098	7.220	-4.740
133.	5647.412	3.920	-8.950	4052.681	-12.830	10.460	3391.650	7.710	-5.010
134.	5654.176	3.930	-9.390	4036.279	-13.310	11.010	3400.127	8.100	-5.300
135.	5660.932	3.890	-9.800	4019.380	-13.700	11.530	3406.096	8.610	-5.670
136.	5667.883	3.820	-10.170	4002.108	-14.080	12.010	3416.121	9.320	-6.180
137.	5674.121	3.710	-10.510	3984.596	-14.190	12.460	3427.752	9.590	-6.350
138.	5680.621	3.560	-10.920	3966.983	-14.280	12.660	3437.732	9.740	-6.500
139.	5686.443	3.360	-11.180	3949.414	-14.240	12.660	3447.990	9.700	-6.500
140.	5692.130	3.170	-11.350	3932.051	-14.070	12.660	3450.436	9.670	-6.500
141.	5697.438	2.930	-11.560	3915.066	-13.760	14.010	3456.436	9.660	-6.500
142.	5702.298	2.670	-11.760	3898.657	-13.270	14.010	3469.666	9.700	-6.500
143.	5706.690	2.360	-11.920	3883.047	-12.580	14.670	3499.472	9.300	-7.010
144.	5710.572	2.040	-12.070	3868.469	-11.660	14.970	3499.472	8.650	-7.010
145.	5713.910	1.760	-12.180	3855.276	-10.470	15.260	3500.593	8.070	-6.950
146.	5716.677	1.420	-12.280	3843.736	-9.570	15.520	3516.737	7.010	-6.950
147.	5718.852	1.080	-12.350	3834.223	-8.710	15.750	3523.578	5.640	-6.880
148.	5720.418	0.720	-12.410	3827.095	-7.980	15.930	3526.761	3.970	-6.810
149.	5721.363	0.360	-12.440	3822.669	-2.570	16.050	3532.046	2.060	-6.760

Z-PLANE (XY-PLANE) LITHIUM TANTALATE (WARNER ET AL)

BULK

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
150.	5721.676	0.000	-12.450	3821.167	0.000	16.090	3533.160	-0.000	5.720
151.	5721.363	-0.360	-12.440	3822.669	2.570	16.050	3532.046	-2.000	6.160
152.	5720.418	-0.720	-12.410	3827.095	4.980	15.930	3528.781	-3.970	6.016
153.	5718.052	-1.080	-12.350	3834.223	7.140	15.750	3523.578	-5.840	6.000
154.	5716.677	-1.420	-12.280	3843.736	6.970	15.520	3516.737	-7.010	6.344
155.	5713.910	-1.760	-12.180	3855.276	10.470	15.260	3506.593	-8.070	6.930
156.	5710.572	-2.080	-12.070	3868.469	11.660	14.970	3499.472	-8.650	7.010
157.	5708.690	-2.380	-11.920	3883.047	12.980	14.670	3489.666	-9.360	7.000
158.	5702.298	-2.670	-11.760	3898.657	13.270	14.340	3479.427	-9.700	6.950
159.	5697.430	-2.930	-11.580	3915.066	13.760	14.010	3468.960	-9.660	6.860
160.	5692.130	-3.170	-11.380	3932.051	14.070	13.650	3458.436	-9.670	6.740
161.	5686.443	-3.380	-11.100	3949.414	14.240	13.280	3447.990	-9.700	6.500
162.	5680.421	-3.560	-10.820	3966.983	14.280	12.860	3437.732	-9.590	6.330
163.	5674.121	-3.710	-10.510	3984.596	14.190	12.460	3427.752	-9.320	6.160
164.	5667.603	-3.820	-10.170	4002.106	14.000	12.010	3416.121	-8.940	5.990
165.	5660.932	-3.890	-9.800	4019.360	13.700	11.530	3403.996	-8.510	5.810
166.	5654.176	-3.930	-9.390	4036.279	13.310	11.010	3400.127	-8.160	5.560
167.	5647.412	-3.920	-8.950	4052.681	12.830	10.460	3391.650	-7.710	5.070
168.	5640.711	-3.860	-8.460	4068.464	12.260	9.870	3384.096	-7.220	4.740
169.	5634.152	-3.760	-7.940	4083.507	11.610	9.240	3376.898	-6.690	4.400
170.	5627.814	-3.610	-7.380	4097.699	10.870	8.570	3370.269	-6.150	4.040
171.	5621.776	-3.420	-6.780	4110.928	10.050	7.860	3364.530	-5.560	3.600
172.	5616.117	-3.180	-6.140	4123.068	9.150	7.110	3358.796	-5.000	3.250
173.	5610.913	-2.900	-5.470	4134.082	8.190	6.320	3353.977	-4.460	2.900
174.	5606.235	-2.570	-4.760	4143.816	7.150	5.490	3349.785	-3.790	2.500
175.	5602.152	-2.210	-4.020	4152.206	6.060	4.640	3346.225	-3.160	2.100
176.	5598.722	-1.810	-3.250	4159.178	4.910	3.750	3343.305	-2.520	1.690
177.	5595.998	-1.360	-2.460	4164.669	3.730	2.830	3341.030	-1.920	1.270
178.	5594.021	-0.930	-1.650	4168.629	2.500	1.900	3339.402	-1.280	0.850
179.	5592.822	-0.470	-0.830	4171.020	1.260	0.950	3338.424	-0.640	0.420
180.	5592.421	0.000	0.000	4171.619	-0.000	-0.000	3338.096	0.000	-0.000

	2-PLANE (XY-PLANE) MAGNESIUM OXIDE				BULK			
	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
8.	9095.272	0.000	6596.404	0.000	0.000	6596.404	0.000	0.000
9.	9096.711	1.040	6596.419	-1.370	0.000	6596.404	0.000	0.000
10.	9101.010	2.060	6590.488	-3.920	0.000	6596.404	0.000	0.000
11.	9108.100	3.050	6590.674	-5.030	0.000	6596.404	0.000	0.000
12.	9117.912	4.000	6567.083	-7.670	0.000	6596.404	0.000	0.000
13.	9130.294	4.950	6565.858	-9.430	0.000	6596.404	0.000	0.000
14.	9145.099	5.710	6529.170	-11.100	0.000	6596.404	0.000	0.000
15.	9162.151	6.460	6585.221	-12.660	0.000	6596.404	0.000	0.000
16.	9181.254	7.140	6478.231	-14.120	0.000	6596.404	0.000	0.000
17.	9202.206	7.730	6448.435	-15.680	0.000	6596.404	0.000	0.000
18.	9224.795	8.250	6416.079	-17.790	0.000	6596.404	0.000	0.000
19.	9248.809	8.680	6381.414	-17.790	0.000	6596.404	0.000	0.000
20.	9274.038	9.050	6344.692	-18.790	0.000	6596.404	0.000	0.000
21.	9300.278	9.330	6306.166	-19.670	0.000	6596.404	0.000	0.000
22.	9327.331	9.550	6266.083	-20.450	0.000	6596.404	0.000	0.000
23.	9355.000	9.710	6224.688	-21.120	0.000	6596.404	0.000	0.000
24.	9383.129	9.800	6182.216	-21.700	0.000	6596.404	0.000	0.000
25.	9411.526	9.840	6138.999	-22.170	0.000	6596.404	0.000	0.000
26.	9440.042	9.820	6094.959	-22.550	0.000	6596.404	0.000	0.000
27.	9468.527	9.760	6050.611	-22.840	0.000	6596.404	0.000	0.000
28.	9496.846	9.650	6006.065	-23.040	0.000	6596.404	0.000	0.000
29.	9524.872	9.510	5961.520	-23.156	0.000	6596.404	0.000	0.000
30.	9552.466	9.320	5917.172	-23.160	0.000	6596.404	0.000	0.000
31.	9579.580	9.110	5873.287	-23.100	0.000	6596.404	0.000	0.000
32.	9606.054	8.860	5829.806	-22.940	0.000	6596.404	0.000	0.000
33.	9631.815	8.580	5787.145	-22.690	0.000	6596.404	0.000	0.000
34.	9656.779	8.260	5745.592	-22.360	0.000	6596.404	0.000	0.000
35.	9680.866	7.960	5704.706	-21.930	0.000	6596.404	0.000	0.000
36.	9704.011	7.620	5665.252	-21.420	0.000	6596.404	0.000	0.000
37.	9726.142	7.250	5627.173	-20.820	0.000	6596.404	0.000	0.000
38.	9747.201	6.870	5588.616	-20.120	0.000	6596.404	0.000	0.000
39.	9767.133	6.480	5555.719	-19.330	0.000	6596.404	0.000	0.000
40.	9785.890	6.070	5522.614	-18.460	0.000	6596.404	0.000	0.000
41.	9803.426	5.640	5491.425	-17.460	0.000	6596.404	0.000	0.000
42.	9819.699	5.210	5462.272	-16.420	0.000	6596.404	0.000	0.000
43.	9834.674	4.770	5435.263	-15.270	0.000	6596.404	0.000	0.000
44.	9848.316	4.310	5410.503	-14.030	0.000	6596.404	0.000	0.000
45.	9860.601	3.850	5386.885	-12.710	0.000	6596.404	0.000	0.000
46.	9871.497	3.390	5368.095	-11.320	0.000	6596.404	0.000	0.000
47.	9880.985	2.910	5350.611	-9.850	0.000	6596.404	0.000	0.000
48.	9889.045	2.440	5335.700	-8.310	0.000	6596.404	0.000	0.000
49.	9895.661	1.950	5323.420	-6.720	0.000	6596.404	0.000	0.000
50.	9898.829	1.470	5313.819	-5.080	0.000	6596.404	0.000	0.000
51.	9898.512	.980	5306.934	-3.410	0.000	6596.404	0.000	0.000
52.	9896.730	.490	5302.792	-1.710	0.000	6596.404	0.000	0.000
53.	9894.470	0.000	5301.409	0.000	0.000	6596.404	0.000	0.000
54.	9890.730	0.000	5302.792	1.710	0.000	6596.404	0.000	0.000
55.	9885.512	0.000	5306.934	3.410	0.000	6596.404	0.000	0.000
56.	9878.820	-1.470	5313.819	5.080	0.000	6596.404	0.000	0.000
57.	9870.661	-1.950	5323.420	6.720	0.000	6596.404	0.000	0.000

Z-PLANE (XY-PLANE) MAGNESIUM OXIDE

	LNGVEL	LPM12	LPM13	FSRWEL	FSPM12	FSPM13	SSRWEL	SSPM12	SSPM13
50.	9089.045	-2.440	0.000	5335.700	8.310	0.000	6590.404	-0.000	0.000
51.	9080.985	-2.910	0.000	5350.611	9.850	0.000	6596.404	-0.000	0.000
52.	9071.697	-3.150	0.000	5360.095	11.320	0.000	6596.404	0.000	0.000
53.	9068.601	-3.050	0.000	5368.085	12.710	0.000	6596.404	0.000	0.000
54.	9068.316	-4.310	0.000	5410.503	14.030	0.000	6596.404	0.000	0.000
55.	9034.674	-4.770	0.000	5435.263	15.270	0.000	6596.404	0.000	0.000
56.	9019.699	-5.210	0.000	5462.272	16.420	0.000	6596.404	0.000	0.000
57.	9003.426	-5.640	0.000	5491.425	17.460	0.000	6596.404	0.000	0.000
58.	9005.890	-6.070	0.000	5522.614	18.460	0.000	6596.404	0.000	0.000
59.	9067.133	-6.460	0.000	5555.719	19.330	0.000	6596.404	0.000	0.000
60.	9047.201	-6.870	0.000	5590.616	20.120	0.000	6596.404	0.000	0.000
61.	9076.142	-7.250	0.000	5627.173	20.820	0.000	6596.404	0.000	0.000
62.	9070.011	-7.620	0.000	5665.252	21.420	0.000	6596.404	0.000	0.000
63.	9060.866	-7.960	0.000	5704.706	21.930	0.000	6596.404	0.000	0.000
64.	9056.774	-8.280	0.000	5745.192	22.360	0.000	6596.404	0.000	0.000
65.	9031.815	-8.560	0.000	5787.145	22.690	0.000	6596.404	0.000	0.000
66.	9006.054	-8.860	0.000	5829.806	22.940	0.000	6596.404	0.000	0.000
67.	9079.580	-9.110	0.000	5873.207	23.100	0.000	6596.404	0.000	0.000
68.	9052.486	-9.320	0.000	5917.172	23.160	0.000	6596.404	0.000	0.000
69.	9024.872	-9.510	0.000	5961.520	23.150	0.000	6596.404	0.000	0.000
70.	9006.546	-9.650	0.000	6006.065	23.040	0.000	6596.404	0.000	0.000
71.	9066.527	-9.760	0.000	6050.611	22.646	0.000	6596.404	0.000	0.000
72.	9040.042	-9.820	0.000	6094.959	22.550	0.000	6596.404	0.000	0.000
73.	9011.526	-9.840	0.000	6138.899	22.510	0.000	6596.404	0.000	0.000
74.	9003.129	-9.800	0.000	6182.216	21.700	0.000	6596.404	0.000	0.000
75.	9055.004	-9.710	0.000	6224.606	21.120	0.000	6596.404	0.000	0.000
76.	9027.331	-9.550	0.000	6266.083	20.450	0.000	6596.404	0.000	0.000
77.	9000.276	-9.330	0.000	6306.166	19.670	0.000	6596.404	0.000	0.000
78.	9274.038	-9.050	0.000	6344.692	18.790	0.000	6596.404	0.000	0.000
79.	9248.809	-8.660	0.000	6381.414	17.790	0.000	6596.404	0.000	0.000
80.	9224.795	-8.250	0.000	6416.079	16.660	0.000	6596.404	0.000	0.000
81.	9202.206	-7.730	0.000	6448.435	15.460	0.000	6596.404	0.000	0.000
82.	9181.254	-7.140	0.000	6478.231	14.120	0.000	6596.404	0.000	0.000
83.	9162.151	-6.460	0.000	6505.221	12.660	0.000	6596.404	0.000	0.000
84.	9145.095	-5.710	0.000	6529.170	11.100	0.000	6596.404	0.000	0.000
85.	9130.294	-4.650	0.000	6549.856	9.430	0.000	6596.404	0.000	0.000
86.	9117.912	-4.000	0.000	6567.083	7.670	0.000	6596.404	0.000	0.000
87.	9108.106	-3.050	0.000	6580.674	5.830	0.000	6596.404	0.000	0.000
88.	9101.010	-2.060	0.000	6590.486	3.920	0.000	6596.404	0.000	0.000
89.	9086.711	-1.840	0.000	6596.415	1.970	0.000	6596.404	0.000	0.000
90.	9095.272	0.000	0.000	6596.404	-0.000	0.000	6596.404	0.000	0.000
91.	9096.711	1.840	0.000	6596.419	-1.970	0.000	6596.404	0.000	0.000
92.	9101.010	2.060	0.000	6590.486	-3.920	0.000	6596.404	0.000	0.000
93.	9108.106	3.050	0.000	6580.674	-5.830	0.000	6596.404	0.000	0.000
94.	9117.912	4.000	0.000	6567.083	-7.670	0.000	6596.404	0.000	0.000
95.	9130.294	4.890	0.000	6549.856	-9.430	0.000	6596.404	0.000	0.000
96.	9145.095	5.710	0.000	6529.170	-11.100	0.000	6596.404	0.000	0.000
97.	9162.151	6.460	0.000	6505.221	-12.660	0.000	6596.404	0.000	0.000
98.	9181.254	7.140	0.000	6478.231	-14.120	0.000	6596.404	0.000	0.000
99.	9202.206	7.730	0.000	6448.435	-15.460	0.000	6596.404	0.000	0.000

Z-PLANE (XY-PLANE) MAGNESIUM OXIDE									
	LPMI12	LPMI13	FSRVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13	
109.	9224.795	0.250	6416.074	-16.660	0.000	6598.404	0.000	0.000	SSPMI13
109.	9248.889	0.600	6381.414	-17.790	0.000	6598.404	-0.000	0.000	0.000
109.	9274.038	9.050	6344.692	-18.750	0.000	6598.404	-0.000	0.000	0.000
109.	9300.278	9.330	6306.166	-19.670	0.000	6598.404	-0.000	0.000	0.000
109.	9327.331	9.550	6266.083	-20.450	0.000	6598.404	-0.000	0.000	0.000
109.	9355.088	9.710	6224.606	-21.120	0.000	6598.404	-0.000	0.000	0.000
109.	9383.129	9.800	6182.216	-21.700	0.000	6598.404	-0.000	0.000	0.000
109.	9411.526	9.840	6138.699	-22.170	0.000	6598.404	-0.000	0.000	0.000
109.	9440.842	9.820	6094.959	-22.550	0.000	6598.404	-0.000	0.000	0.000
109.	9468.527	9.760	6050.611	-22.840	0.000	6598.404	-0.000	0.000	0.000
109.	9496.846	9.650	6006.065	-23.040	0.000	6598.404	-0.000	0.000	0.000
109.	9524.872	9.510	5961.520	-23.150	0.000	6598.404	-0.000	0.000	0.000
109.	9552.486	9.320	5917.172	-23.160	0.000	6598.404	-0.000	0.000	0.000
109.	9579.580	9.110	5873.207	-23.100	0.000	6598.404	-0.000	0.000	0.000
109.	9606.854	8.860	5829.806	-22.940	0.000	6598.404	-0.000	0.000	0.000
109.	9631.815	8.560	5787.145	-22.690	0.000	6598.404	-0.000	0.000	0.000
109.	9656.779	8.260	5745.392	-22.360	0.000	6598.404	-0.000	0.000	0.000
109.	9680.860	7.960	5704.706	-21.930	0.000	6598.404	-0.000	0.000	0.000
109.	9704.011	7.620	5665.252	-21.420	0.000	6598.404	-0.000	0.000	0.000
109.	9726.142	7.250	5627.173	-20.820	0.000	6598.404	-0.000	0.000	0.000
109.	9747.201	6.870	5590.616	-20.120	0.000	6598.404	-0.000	0.000	0.000
109.	9767.133	6.480	5555.719	-19.330	0.000	6598.404	-0.000	0.000	0.000
109.	9785.990	6.070	5522.614	-18.460	0.000	6598.404	-0.000	0.000	0.000
109.	9803.626	5.640	5491.425	-17.460	0.000	6598.404	-0.000	0.000	0.000
109.	9819.595	5.210	5462.272	-16.420	0.000	6598.404	-0.000	0.000	0.000
109.	9834.674	4.770	5435.263	-15.270	0.000	6598.404	-0.000	0.000	0.000
109.	9848.316	4.310	5410.503	-14.030	0.000	6598.404	-0.000	0.000	0.000
109.	9860.601	3.850	5386.085	-12.710	0.000	6598.404	-0.000	0.000	0.000
109.	9871.497	3.390	5368.095	-11.320	0.000	6598.404	-0.000	0.000	0.000
109.	9880.985	2.910	5350.611	-9.850	0.000	6598.404	-0.000	0.000	0.000
109.	9889.045	2.440	5335.700	-8.310	0.000	6598.404	-0.000	0.000	0.000
109.	9895.661	1.950	5323.420	-6.720	0.000	6598.404	-0.000	0.000	0.000
109.	9900.820	1.470	5313.619	-5.060	0.000	6598.404	-0.000	0.000	0.000
109.	9904.512	9.00	5306.934	-3.410	0.000	6598.404	-0.000	0.000	0.000
109.	9906.730	-0.000	5302.792	-1.710	0.000	6598.404	-0.000	0.000	0.000
109.	9907.470	-0.000	5301.409	0.000	0.000	6598.404	-0.000	0.000	0.000
109.	9908.512	-0.000	5302.792	1.710	0.000	6598.404	-0.000	0.000	0.000
109.	9909.020	-0.000	5306.934	3.410	0.000	6598.404	-0.000	0.000	0.000
109.	9909.561	-1.470	5313.619	5.060	0.000	6598.404	-0.000	0.000	0.000
109.	9909.845	-2.440	5335.700	6.720	0.000	6598.404	-0.000	0.000	0.000
109.	9909.985	-3.390	5350.611	8.310	0.000	6598.404	-0.000	0.000	0.000
109.	9910.497	-4.310	5368.095	9.850	0.000	6598.404	-0.000	0.000	0.000
109.	9910.601	-5.210	5386.085	11.320	0.000	6598.404	-0.000	0.000	0.000
109.	9910.985	-6.070	5406.085	12.710	0.000	6598.404	-0.000	0.000	0.000
109.	9911.497	-6.870	5427.173	14.030	0.000	6598.404	-0.000	0.000	0.000
109.	9911.815	-7.620	5448.316	15.270	0.000	6598.404	-0.000	0.000	0.000
109.	9912.142	-8.260	5469.580	16.420	0.000	6598.404	-0.000	0.000	0.000
109.	9912.486	-8.860	5490.854	17.460	0.000	6598.404	-0.000	0.000	0.000
109.	9912.800	-9.480	5512.133	18.460	0.000	6598.404	-0.000	0.000	0.000
109.	9913.133	-10.000	5533.425	19.330	0.000	6598.404	-0.000	0.000	0.000
109.	9913.497	-10.560	5554.719		0.000	6598.404	-0.000	0.000	0.000
109.	9913.815	-11.110	5576.014		0.000	6598.404	-0.000	0.000	0.000
109.	9914.142	-11.660	5597.309		0.000	6598.404	-0.000	0.000	0.000
109.	9914.486	-12.210	5618.604		0.000	6598.404	-0.000	0.000	0.000
109.	9914.800	-12.760	5639.900		0.000	6598.404	-0.000	0.000	0.000
109.	9915.133	-13.310	5661.195		0.000	6598.404	-0.000	0.000	0.000
109.	9915.497	-13.860	5682.490		0.000	6598.404	-0.000	0.000	0.000
109.	9915.815	-14.410	5703.785		0.000	6598.404	-0.000	0.000	0.000
109.	9916.142	-14.960	5725.080		0.000	6598.404	-0.000	0.000	0.000
109.	9916.486	-15.510	5746.375		0.000	6598.404	-0.000	0.000	0.000
109.	9916.800	-16.060	5767.670		0.000	6598.404	-0.000	0.000	0.000
109.	9917.133	-16.610	5788.965		0.000	6598.404	-0.000	0.000	0.000
109.	9917.497	-17.160	5810.260		0.000	6598.404	-0.000	0.000	0.000
109.	9917.815	-17.710	5831.555		0.000	6598.404	-0.000	0.000	0.000
109.	9918.142	-18.260	5852.850		0.000	6598.404	-0.000	0.000	0.000
109.	9918.486	-18.810	5874.145		0.000	6598.404	-0.000	0.000	0.000
109.	9918.800	-19.360	5895.440		0.000	6598.404	-0.000	0.000	0.000
109.	9919.133	-19.910	5916.735		0.000	6598.404	-0.000	0.000	0.000
109.	9919.497	-20.460	5938.030		0.000	6598.404	-0.000	0.000	0.000
109.	9919.815	-21.010	5959.325		0.000	6598.404	-0.000	0.000	0.000
109.	9920.142	-21.560	5980.620		0.000	6598.404	-0.000	0.000	0.000
109.	9920.486	-22.110	6001.915		0.000	6598.404	-0.000	0.000	0.000
109.	9920.800	-22.660	6023.210		0.000	6598.404	-0.000	0.000	0.000
109.	9921.133	-23.210	6044.505		0.000	6598.404	-0.000	0.000	0.000
109.	9921.497	-23.760	6065.800		0.000	6598.404	-0.000	0.000	0.000
109.	9921.815	-24.310	6087.095		0.000	6598.404	-0.000	0.000	0.000
109.	9922.142	-24.860	6108.390		0.000	6598.404	-0.000	0.000	0.000
109.	9922.486	-25.410	6129.685		0.000	6598.404	-0.000	0.000	0.000
109.	9922.800	-25.960	6150.980		0.000	6598.404	-0.000	0.000	0.000
109.	9923.133	-26.510	6172.275		0.000	6598.404	-0.000	0.000	0.000
109.	9923.497	-27.060	6193.570		0.000	6598.404	-0.000	0.000	0.000
109.	9923.815	-27.610	6214.865		0.000	6598.404	-0.000	0.000	0.000
109.	9924.142	-28.160	6236.160		0.000	6598.404	-0.000	0.000	0.000
109.	9924.486	-28.710	6257.455		0.000	6598.404	-0.000	0.000	0.000
109.	9924.800	-29.260	6278.750		0.000	6598.404	-0.000	0.000	0.000
109.	9925.133	-29.810	6299.045		0.000	6598.404	-0.000	0.000	0.000
109.	9925.497	-30.360	6320.340		0.000	6598.404	-0.000	0.000	0.000
109.	9925.815	-30.910	6341.635		0.000	6598.404	-0.000	0.000	0.000
109.	9926.142	-31.460	6362.930		0.000	6598.404	-0.000	0.000	0.000
109.	9926.486	-32.010	6384.225		0.000	6598.404	-0.000	0.000	0.000
109.	9926.800	-32.560	6405.520		0.000	6598.404	-0.000	0.000	0.000
109.	9927.133	-33.110	6426.815		0.000	6598.404	-0.000	0.000	0.000
109.	9927.497	-33.660	6448.110		0.000	6598.404	-0.000	0.000	0.000
109.	9927.815	-34.210	6469.405		0.000	6598.404	-0.000	0.000	0.000
109.	9928.142	-34.760	6490.700		0.000	6598.404	-0.000	0.000	0.000
109.	9928.486	-35.310	6512.000		0.000	6598.404	-0.000	0.000	0.000
109.	9928.800	-35.860	6533.300		0.000	6598.404	-0.000	0.000	0.000
109.	9929.133	-36.410	6554.600		0.000	6598.404	-0.000	0.000	0.000
109.	9929.497	-36.960	6575.900		0.000	6598.404	-0.000	0.000	0.000
109.	9929.815	-37.510	6597.200		0.000	6598.404	-0.000	0.000	0.000
109.	9930.142	-38.060	6618.500		0.000	6598.404	-0.000	0.000	0.000
109.	9930.486	-38.610	6639.800		0.000	6598.404	-0.000	0.000	0.000
109.	9930.800	-39.160	6661.100		0.000	6598.404	-0.000	0.000	0.000
109.	9931.133	-39.710	6682.400		0.000	6598.404	-0.000	0.000	0.000
109.	9931.497	-40.260	6703.700		0.000	6598.404	-0.000	0.000	0.000
109.	9931.815	-40.810	6725.000		0.000	6598.404	-0.000	0.000	0.000
109.	9932.142	-41.360	6746.300		0.000	6598.404	-0.000	0.000	0.000
109.	9932.486	-41.910	6767.600		0.000	6598.404	-0.000	0.000	0.000
109.	9932.800	-42.460	6788.900		0.000	6598.404	-0.000	0.000	0.000
109.	9933.133	-43.010	6810.200		0.000	6598.404	-0.000	0.000	0

Z-PLANE (XY-PLANE) MAGNESIUM OXIDE									
	LNGVEL	LPHI12		LPHI13		FSRVEL		FSPHI12	
		BULK		BULK		BULK		BULK	
		LPHI12	LPHI13	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13	
150.	9747.201	-6.870	0.000	5590.616	20.120	6590.404	0.000	0.000	SSPHI13
151.	9726.142	-7.250	0.000	5627.173	20.820	6598.404	0.000	0.000	0.000
152.	9704.011	-7.620	0.000	5665.252	21.420	6598.404	0.000	0.000	0.000
153.	9680.866	-7.960	0.000	5704.706	21.930	6598.404	0.000	0.000	0.000
154.	9656.779	-8.280	0.000	5745.392	22.360	6598.404	0.000	0.000	0.000
155.	9631.815	-8.580	0.000	5787.145	22.690	6598.404	0.000	0.000	0.000
156.	9606.054	-8.860	0.000	5829.806	22.940	6598.404	0.000	0.000	0.000
157.	9579.560	-9.110	0.000	5873.207	23.100	6598.404	0.000	0.000	0.000
158.	9552.466	-9.320	0.000	5917.172	23.160	6598.404	0.000	0.000	0.000
159.	9524.872	-9.510	0.000	5961.520	23.150	6598.404	0.000	0.000	0.000
160.	9496.846	-9.650	0.000	6006.065	23.040	6598.404	0.000	0.000	0.000
161.	9468.527	-9.760	0.000	6050.611	22.840	6598.404	0.000	0.000	0.000
162.	9440.042	-9.820	0.000	6094.959	22.550	6598.404	0.000	0.000	0.000
163.	9411.526	-9.840	0.000	6138.899	22.170	6598.404	0.000	0.000	0.000
164.	9383.129	-9.800	0.000	6182.216	21.700	6598.404	0.000	0.000	0.000
165.	9355.008	-9.710	0.000	6224.666	21.120	6598.404	0.000	0.000	0.000
166.	9327.331	-9.550	0.000	6266.083	20.450	6598.404	0.000	0.000	0.000
167.	9300.276	-9.330	0.000	6306.166	19.670	6598.404	0.000	0.000	0.000
168.	9274.038	-9.050	0.000	6344.642	18.790	6598.404	0.000	0.000	0.000
169.	9248.809	-8.680	0.000	6381.414	17.790	6598.404	0.000	0.000	0.000
170.	9224.795	-8.250	0.000	6416.079	16.660	6598.404	0.000	0.000	0.000
171.	9202.206	-7.730	0.000	6448.835	15.460	6598.404	0.000	0.000	0.000
172.	9181.254	-7.140	0.000	6478.231	14.120	6598.404	0.000	0.000	0.000
173.	9162.151	-6.460	0.000	6505.221	12.660	6598.404	0.000	0.000	0.000
174.	9145.899	-5.710	0.000	6529.170	11.100	6598.404	0.000	0.000	0.000
175.	9130.294	-4.850	0.000	6549.856	9.430	6598.404	0.000	0.000	0.000
176.	9117.912	-4.000	0.000	6567.083	7.670	6598.404	0.000	0.000	0.000
177.	9108.108	-3.050	0.000	6580.674	5.830	6598.404	0.000	0.000	0.000
178.	9101.010	-2.060	0.000	6590.466	3.920	6598.404	0.000	0.000	0.000
179.	9096.711	-1.040	0.000	6596.419	1.970	6598.404	0.000	0.000	0.000
180.	9095.272	0.000	0.000	6598.404	-0.000	6598.404	0.000	0.000	0.000

111-PLANE MAGNESIUM OXIDE

	LNGLVL	LPML12	LPML13	FSRVEL	FSPM12	FSPM13	SRVEL	SSPM12	SSPM13
0.	9907.470	-0.000	0.000	6598.404	-0.000	0.000	5391.409	0.000	-0.000
1.	9907.505	.060	.400	6597.625	-0.760	-0.550	5302.166	.940	-0.250
2.	9907.926	.150	.800	6595.250	-1.550	-1.690	5304.431	1.070	-1.550
3.	9908.491	.220	1.190	6591.411	-2.310	-1.640	5300.137	2.790	-1.870
4.	9909.272	.290	1.590	6586.005	-3.070	-2.180	5313.446	3.690	-2.170
5.	9910.260	.360	1.970	6579.097	-3.810	-2.710	5320.157	4.580	-2.720
6.	9911.444	.420	2.350	6570.716	-4.540	-3.230	5326.301	5.440	-3.210
7.	9912.809	.480	2.720	6560.907	-5.240	-3.750	5337.641	6.260	-3.720
8.	9914.341	.530	3.080	6549.712	-5.930	-4.250	5348.736	7.060	-4.210
9.	9916.020	.580	3.430	6537.184	-6.590	-4.740	5360.935	7.810	-4.660
10.	9917.827	.620	3.770	6523.365	-7.210	-5.220	5374.363	8.520	-5.140
11.	9919.743	.650	4.100	6508.364	-7.810	-5.680	5389.015	9.180	-5.500
12.	9921.744	.670	4.410	6492.260	-8.360	-6.130	5404.757	9.790	-5.800
13.	9923.809	.690	4.710	6475.097	-8.880	-6.560	5421.520	10.340	-6.030
14.	9925.915	.700	4.990	6456.993	-9.340	-6.970	5439.236	10.820	-6.170
15.	9928.036	.700	5.260	6438.056	-9.750	-7.370	5457.776	11.230	-6.230
16.	9930.154	.700	5.520	6418.407	-10.100	-7.750	5477.036	11.570	-6.270
17.	9932.242	.680	5.750	6398.101	-10.390	-8.110	5496.880	11.830	-6.200
18.	9934.278	.660	5.970	6377.534	-10.590	-8.450	5517.156	11.980	-6.020
19.	9936.240	.630	6.180	6356.640	-10.700	-8.770	5537.700	12.040	-5.780
20.	9938.107	.600	6.360	6335.702	-10.700	-9.070	5558.304	11.970	-5.480
21.	9939.861	.560	6.530	6314.954	-10.570	-9.350	5578.742	11.760	-5.150
22.	9941.482	.510	6.680	6294.669	-10.290	-9.610	5598.743	11.530	-4.800
23.	9942.984	.460	6.820	6275.164	-9.940	-9.810	5617.990	11.390	-4.450
24.	9944.262	.400	6.930	6256.805	-9.480	-10.060	5636.116	10.830	-4.100
25.	9945.392	.340	7.030	6240.027	-8.980	-10.250	5652.706	10.050	-3.750
26.	9946.332	.280	7.110	6225.288	-8.460	-10.420	5667.283	9.020	-3.410
27.	9947.074	.210	7.170	6213.094	-7.910	-10.550	5679.351	7.720	-3.070
28.	9947.605	.140	7.220	6203.937	-7.360	-10.650	5689.417	6.130	-2.730
29.	9947.932	.070	7.250	6196.244	-6.800	-10.710	5694.055	4.270	-2.390
30.	9948.040	-0.000	7.260	6196.311	-6.240	-10.730	5695.969	2.200	-2.050
31.	9947.932	-0.070	7.250	6196.244	-5.680	-10.710	5694.055	0.000	-1.710
32.	9947.605	-0.140	7.220	6203.937	-5.110	-10.650	5689.417	-2.270	-1.370
33.	9947.074	-0.210	7.170	6213.094	-4.560	-10.550	5679.351	-4.130	-1.030
34.	9946.332	-0.280	7.110	6225.288	-4.000	-10.420	5667.283	-5.720	-0.690
35.	9945.392	-0.340	7.030	6240.027	-3.440	-10.250	5652.706	-7.020	-0.350
36.	9944.262	-0.400	6.930	6256.805	-2.880	-10.060	5636.116	-8.050	0.000
37.	9942.984	-0.460	6.820	6275.164	-2.310	-9.810	5617.990	-8.830	0.340
38.	9941.482	-0.510	6.680	6294.669	-1.750	-9.610	5598.743	-9.480	0.690
39.	9939.861	-0.560	6.530	6314.954	-1.180	-9.350	5578.742	-10.050	1.040
40.	9938.107	-0.600	6.360	6335.702	-0.620	-9.070	5558.304	-10.570	1.390
41.	9936.240	-0.630	6.180	6356.640	-0.050	-8.770	5537.706	-11.040	1.740
42.	9934.278	-0.660	5.970	6377.534	0.510	-8.450	5517.159	-11.570	2.090
43.	9932.242	-0.690	5.750	6398.101	1.070	-8.110	5496.880	-12.040	2.440
44.	9930.154	-0.700	5.520	6418.407	1.620	-7.750	5477.036	-12.570	2.790
45.	9928.036	-0.700	5.260	6438.056	2.170	-7.370	5457.776	-13.040	3.140
46.	9925.915	-0.700	4.990	6456.993	2.720	-6.970	5439.236	-13.570	3.490
47.	9923.809	-0.690	4.710	6475.097	3.270	-6.560	5421.520	-14.040	3.840
48.	9921.744	-0.670	4.410	6492.260	3.810	-6.130	5404.757	-14.570	4.190
49.	9919.743	-0.650	4.100	6508.364	4.360	-5.680	5389.015	-15.100	4.540

111-PLANE MAGNESIUM OXIDE

	LNGL	LPH12	LPH13	FSRWEL	FSPH12	FSPH13	SSRWEL	SSPH12	SSPH13
50.	9937.827	-1620	3.770	6523.385	7.210	-5.220	5374.383	-8.520	-5.150
51.	9916.020	-1560	3.430	6537.184	6.590	-4.740	5360.935	-7.610	-4.800
52.	9914.340	-1530	3.080	6549.712	5.930	-4.250	5348.736	-7.060	-4.210
53.	9912.809	-1400	2.720	6560.906	5.240	-3.750	5337.041	-6.260	-3.720
54.	9911.444	-1420	2.350	6570.716	4.540	-3.230	5326.301	-5.440	-3.210
55.	9910.260	-1360	1.970	6579.097	3.810	-2.710	5320.157	-4.580	-2.660
56.	9909.272	-1290	1.590	6586.005	3.070	-2.180	5313.446	-3.690	-2.170
57.	9908.491	-1220	1.190	6591.411	2.310	-1.640	5306.197	-2.790	-1.640
58.	9907.926	-1150	.800	6595.290	1.550	-1.090	5304.431	-1.870	-1.030
59.	9907.565	-1060	.400	6597.625	.780	-.550	5302.166	-.940	-.250
60.	9907.470	0.000	0.000	6596.404	-0.000	0.000	5301.409	-0.000	-0.000
61.	9907.585	.080	-1.400	6597.625	-1.700	.550	5302.166	.940	.250
62.	9907.926	.150	-1.600	6595.290	-1.550	1.050	5304.431	1.670	1.030
63.	9908.491	.220	-1.190	6591.411	-1.310	1.640	5306.197	2.790	1.640
64.	9909.272	.250	-1.590	6586.005	-1.070	2.160	5313.446	3.690	2.160
65.	9910.260	.360	-1.970	6579.097	-1.810	2.710	5320.157	4.580	2.700
66.	9911.444	.420	-2.350	6570.716	-2.540	3.230	5326.301	5.440	3.210
67.	9912.809	.460	-2.720	6560.907	-3.240	3.750	5337.041	6.260	3.720
68.	9914.341	.530	-3.080	6549.711	-3.930	4.250	5348.736	7.060	4.210
69.	9916.020	.560	-3.430	6537.184	-4.590	4.740	5360.935	7.810	4.680
70.	9917.827	.620	-3.770	6523.385	-5.220	5.220	5374.383	8.520	5.140
71.	9919.743	.650	-4.100	6508.384	-7.610	5.660	5389.015	9.100	5.500
72.	9921.744	.670	-4.410	6492.254	-9.360	6.130	5404.757	9.790	6.000
73.	9923.810	.690	-4.710	6475.097	-10.860	6.560	5421.228	10.340	6.390
74.	9925.915	.700	-4.990	6456.993	-12.340	6.970	5439.236	10.820	6.770
75.	9928.038	.700	-5.260	6438.056	-13.750	7.370	5457.776	11.230	7.120
76.	9930.155	.700	-5.520	6418.407	-15.100	7.750	5477.036	11.570	7.440
77.	9932.242	.660	-5.750	6398.181	-16.360	8.110	5496.660	11.830	7.740
78.	9934.276	.660	-5.970	6377.533	-17.590	8.450	5517.158	12.050	8.020
79.	9936.240	.630	-6.180	6356.639	-18.690	8.770	5537.699	12.040	8.260
80.	9938.106	.600	-6.360	6335.701	-19.700	9.070	5558.304	11.970	8.440
81.	9939.661	.560	-6.530	6314.954	-20.570	9.350	5578.722	11.760	8.600
82.	9941.483	.510	-6.680	6294.666	-21.290	9.610	5598.742	11.530	8.840
83.	9943.955	.460	-6.820	6275.164	-21.840	9.850	5617.940	11.230	9.070
84.	9946.262	.400	-6.930	6256.805	-22.100	10.060	5636.116	10.820	9.210
85.	9948.392	.340	-7.030	6240.027	-22.080	10.250	5652.706	10.340	9.310
86.	9946.333	.260	-7.110	6225.286	-21.110	10.420	5667.283	9.790	9.370
87.	9947.074	.210	-7.170	6213.094	-19.660	10.580	5679.351	9.100	9.270
88.	9947.609	.140	-7.220	6203.936	-17.960	10.650	5688.417	8.440	9.300
89.	9947.933	.070	-7.250	6196.244	-16.040	10.710	5694.055	7.810	9.310
90.	9948.041	-0.000	-7.260	6196.244	-14.000	10.730	5695.969	7.060	9.320
91.	9947.933	-1.070	-7.250	6198.244	-11.960	10.710	5694.055	6.260	9.310
92.	9947.609	-1.140	-7.220	6203.936	-9.960	10.650	5688.417	5.440	9.300
93.	9947.074	-1.210	-7.170	6213.094	-7.960	10.580	5679.351	4.580	9.270
94.	9946.333	-1.260	-7.110	6225.286	-5.960	10.420	5667.283	3.690	9.230
95.	9945.392	-1.340	-7.030	6240.027	-3.960	10.250	5652.706	2.790	9.190
96.	9944.262	-1.400	-6.930	6256.809	-1.960	10.060	5636.116	1.870	9.090
97.	9942.955	-1.460	-6.820	6275.164	.840	9.850	5617.990	1.030	8.940
98.	9941.483	-1.510	-6.680	6294.666	2.840	9.610	5598.742	.250	8.690
99.	9939.661	-1.560	-6.530	6314.954	4.840	9.350	5578.742	.000	8.440

111-PLANE MAGNESIUM OXIDE

BULK

	LNGLVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	9930.106	-600	-6.360	6335.701	10.700	9.070	5550.304	-11.973	8.480
101.	9936.240	-630	-6.180	6356.639	10.650	8.770	5537.699	-12.040	8.260
102.	9934.276	-660	-5.970	6377.533	10.590	8.450	5517.158	-11.500	8.020
103.	9932.262	-660	-5.750	6396.181	10.380	8.110	5496.080	-11.630	7.740
104.	9930.155	-700	-5.520	6416.407	10.100	7.710	5477.036	-11.573	7.490
105.	9928.036	-700	-5.260	6438.056	9.750	7.370	5457.778	-11.230	7.120
106.	9925.915	-700	-4.990	6456.993	9.340	6.970	5439.236	-10.820	6.710
107.	9923.810	-690	-4.710	6475.097	8.900	6.560	5421.526	-10.340	6.300
108.	9921.744	-670	-4.410	6492.259	8.360	6.130	5404.757	-9.790	5.800
109.	9919.743	-650	-4.100	6508.384	7.810	5.680	5389.015	-9.180	5.280
110.	9917.827	-620	-3.770	6523.385	7.210	5.220	5374.303	-8.520	4.740
111.	9916.020	-560	-3.430	6537.184	6.590	4.740	5360.435	-7.810	4.180
112.	9914.341	-530	-3.060	6549.711	5.930	4.250	5348.730	-7.050	3.720
113.	9912.805	-460	-2.720	6560.907	5.240	3.750	5337.841	-6.260	3.210
114.	9911.444	-420	-2.350	6570.718	4.540	3.230	5328.301	-5.440	2.700
115.	9910.260	-360	-1.970	6579.097	3.810	2.710	5320.137	-4.500	2.110
116.	9909.272	-290	-1.590	6586.005	3.070	2.180	5313.446	-3.530	1.500
117.	9908.491	-220	-1.190	6591.411	2.310	1.640	5306.197	-2.790	1.070
118.	9907.926	-150	-0.800	6595.290	1.550	1.090	5300.431	-1.870	0.590
119.	9907.585	-060	-0.400	6597.625	0.780	0.550	5302.166	-0.900	0.000
120.	9907.470	-000	0.000	6598.404	0.000	0.000	5301.409	0.000	-0.500
121.	9907.505	080	0.400	6597.625	-0.760	-0.550	5302.166	0.900	-1.000
122.	9907.926	150	0.800	6595.290	-1.550	-1.090	5300.431	1.870	-1.800
123.	9908.491	220	1.190	6591.411	-2.310	-1.640	5306.197	2.790	-2.170
124.	9909.272	290	1.590	6586.005	-3.070	-2.180	5313.446	3.530	-2.700
125.	9910.260	360	1.970	6579.097	-3.810	-2.710	5320.137	4.500	-3.210
126.	9911.444	420	2.350	6570.718	-4.540	-3.230	5328.301	5.440	-3.720
127.	9912.809	480	2.720	6560.908	-5.240	-3.750	5337.841	6.260	-4.210
128.	9914.340	530	3.060	6549.712	-5.930	-4.250	5348.736	7.050	-4.800
129.	9916.020	560	3.430	6537.184	-6.590	-4.740	5360.435	7.810	-5.400
130.	9917.827	620	3.770	6523.385	-7.210	-5.220	5374.303	8.520	-6.000
131.	9919.743	650	4.100	6508.384	-7.810	-5.680	5389.015	9.180	-6.560
132.	9921.744	670	4.410	6492.260	-8.360	-6.130	5404.757	9.790	-7.050
133.	9923.804	650	4.710	6475.097	-8.800	-6.580	5421.526	10.340	-7.490
134.	9925.915	700	4.990	6456.993	-9.340	-6.970	5439.236	10.820	-7.810
135.	9928.036	700	5.260	6438.056	-9.750	-7.370	5457.778	11.230	-8.120
136.	9930.154	700	5.520	6416.407	-10.100	-7.750	5477.036	11.570	-8.480
137.	9932.242	660	5.750	6396.181	-10.380	-8.110	5496.080	11.630	-8.740
138.	9934.277	660	5.970	6377.534	-10.590	-8.450	5517.159	11.900	-9.020
139.	9936.240	630	6.180	6356.640	-10.640	-8.770	5537.700	12.040	-9.260
140.	9938.107	600	6.360	6335.702	-10.700	-9.070	5558.305	12.090	-9.480
141.	9939.861	560	6.530	6314.954	-10.570	-9.350	5578.782	11.760	-9.610
142.	9941.482	510	6.660	6294.669	-10.290	-9.610	5596.783	11.390	-9.640
143.	9942.954	460	6.820	6275.164	-9.840	-9.850	5617.990	10.930	-9.570
144.	9944.262	400	6.930	6256.805	-9.180	-10.060	5636.118	10.050	-9.080
145.	9945.392	340	7.030	6240.027	-8.280	-10.250	5652.706	9.020	-8.100
146.	9946.332	260	7.110	6225.286	-7.110	-10.420	5667.293	7.720	-7.230
147.	9947.074	210	7.170	6213.094	-5.660	-10.550	5679.351	6.130	-6.210
148.	9947.609	140	7.220	6203.937	-3.960	-10.650	5686.417	4.270	-5.300
149.	9947.932	070	7.250	6198.244	-2.040	-10.710	5694.055	2.200	-4.310

111-PLANE MAGNESIUM OXIDE

BULK

	LNQVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
150.	9948.840	0.000	7.260	6196.311	-0.000	-10.730	5695.969	-0.000	-3.320
151.	9947.932	-0.070	7.250	6198.244	2.040	-10.710	5694.055	-2.204	-3.310
152.	9947.609	-0.140	7.220	6203.937	3.960	-10.650	5686.417	-4.270	-3.300
153.	9947.074	-0.210	7.170	6213.094	5.660	-10.550	5679.351	-6.130	-3.290
154.	9946.332	-0.260	7.110	6225.286	7.110	-10.420	5667.283	-7.720	-3.280
155.	9945.392	-0.340	7.030	6240.027	8.260	-10.250	5652.706	-9.020	-3.170
156.	9944.262	-0.400	6.930	6256.809	9.160	-10.060	5636.116	-10.020	-3.000
157.	9942.954	-0.460	6.820	6275.164	9.840	-9.850	5617.990	-10.830	-2.970
158.	9941.482	-0.510	6.680	6294.869	10.290	-9.610	5596.783	-11.390	-2.800
159.	9939.861	-0.560	6.530	6314.954	10.570	-9.350	5576.742	-11.760	-2.670
160.	9938.107	-0.600	6.360	6335.702	10.700	-9.070	5556.304	-11.970	-2.400
161.	9936.240	-0.630	6.180	6356.640	10.850	-8.770	5537.708	-12.040	-2.200
162.	9934.276	-0.660	5.970	6377.534	10.990	-8.450	5517.158	-11.960	-2.020
163.	9932.242	-0.680	5.750	6398.181	10.360	-8.110	5496.880	-11.630	-1.740
164.	9930.154	-0.700	5.520	6418.407	10.100	-7.750	5477.936	-11.370	-1.400
165.	9928.038	-0.700	5.260	6438.056	9.750	-7.370	5457.776	-11.230	-1.120
166.	9925.915	-0.650	4.990	6456.993	9.340	-6.970	5439.236	-10.820	-0.770
167.	9923.809	-0.600	4.710	6475.097	8.880	-6.560	5421.526	-10.340	-0.350
168.	9921.744	-0.570	4.410	6492.260	8.360	-6.130	5404.757	-9.790	-0.000
169.	9919.743	-0.550	4.100	6508.384	7.810	-5.680	5388.015	-9.180	-0.300
170.	9917.827	-0.620	3.770	6523.385	7.210	-5.220	5371.383	-8.520	-0.700
171.	9916.020	-0.580	3.430	6537.184	6.590	-4.740	5354.935	-7.810	-1.100
172.	9914.341	-0.530	3.080	6549.712	5.930	-4.250	5340.736	-7.060	-1.500
173.	9912.805	-0.460	2.720	6560.907	5.240	-3.750	5327.841	-6.260	-1.900
174.	9911.444	-0.420	2.350	6570.718	4.540	-3.230	5320.301	-5.440	-2.300
175.	9910.260	-0.360	1.970	6579.097	3.810	-2.710	5320.157	-4.590	-2.700
176.	9909.272	-0.290	1.590	6586.005	3.070	-2.180	5313.446	-3.690	-3.100
177.	9908.491	-0.220	1.190	6591.411	2.310	-1.640	5308.137	-2.740	-3.500
178.	9907.926	-0.150	.800	6595.290	1.550	-1.090	5304.431	-1.870	-3.900
179.	9907.585	-0.060	.400	6597.625	.760	-0.550	5301.166	-0.940	-4.300
180.	9907.470	0.000	-0.000	6598.404	-0.000	0.000	5301.409	0.000	0.000

110-PLANE MAGNESIUM OXIDE

BULK

	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
0.	10163.790	0.000	5766.256	12.340	0.000	5766.230	-12.340	0.000
1.	10163.260	-3.40	5766.349	12.350	-0.000	5766.998	-11.540	-0.000
2.	10161.652	-7.00	5810.619	12.420	0.000	5725.328	-10.660	-0.000
3.	10158.942	-1.060	5833.819	12.440	-0.000	5707.331	-9.760	0.000
4.	10155.112	-1.420	5855.520	12.440	0.000	5631.083	-8.760	0.000
5.	10150.144	-1.790	5876.094	12.420	-0.000	5676.658	-7.760	0.000
6.	10144.023	-2.178	5908.712	12.390	0.000	5664.118	-6.680	0.000
7.	10136.739	-2.550	5923.346	12.350	-0.000	5633.523	-5.500	0.000
8.	10128.282	-2.930	5945.973	12.290	0.000	5644.722	-4.400	0.000
9.	10120.846	-3.310	5968.559	12.220	-0.000	5636.360	-3.220	0.000
10.	10107.834	-3.700	5991.061	12.130	0.000	5633.869	-2.010	0.000
11.	10095.839	-4.090	6013.511	12.030	0.000	5631.479	-0.780	0.000
12.	10082.667	-4.470	6035.823	11.920	0.000	5631.286	0.460	0.000
13.	10068.323	-4.860	6057.992	11.800	-0.000	5633.067	1.700	0.000
14.	10052.416	-5.240	6079.993	11.660	0.000	5637.056	2.940	0.000
15.	10036.137	-5.620	6101.799	11.520	-0.000	5633.176	4.170	-0.000
16.	10018.382	-5.990	6123.388	11.360	-0.000	5621.405	5.370	0.000
17.	9999.446	-6.360	6144.735	11.190	0.000	5601.724	6.550	-0.000
18.	9979.436	-6.730	6165.817	11.010	0.000	5674.180	7.700	0.000
19.	9958.358	-7.090	6186.611	10.820	0.000	5688.994	8.810	0.000
20.	9936.218	-7.440	6207.094	10.620	0.000	5704.058	9.870	0.000
21.	9913.071	-7.780	6227.246	10.420	-0.000	5723.136	10.890	0.000
22.	9888.944	-8.110	6247.044	10.200	0.000	5743.263	11.850	0.000
23.	9863.876	-8.430	6266.468	9.970	0.000	5765.169	12.750	-0.000
24.	9837.910	-8.740	6285.498	9.740	0.000	5788.772	13.590	0.000
25.	9811.094	-9.030	6304.114	9.500	0.000	5813.365	14.360	0.000
26.	9783.479	-9.310	6322.298	9.250	-0.000	5840.713	15.070	0.000
27.	9755.121	-9.570	6340.032	8.990	0.000	5868.055	15.710	0.000
28.	9726.083	-9.810	6357.296	8.720	-0.000	5898.299	16.280	0.000
29.	9696.433	-10.030	6374.075	8.450	0.000	5928.230	16.770	0.000
30.	9666.242	-10.230	6390.352	8.170	0.000	5958.622	17.190	-0.000
31.	9635.591	-10.400	6406.110	7.890	0.000	5983.244	17.530	0.000
32.	9604.566	-10.540	6421.335	7.600	0.000	6006.658	17.800	0.000
33.	9573.260	-10.650	6436.031	7.300	0.000	6030.717	17.900	0.000
34.	9541.773	-10.720	6450.126	7.000	0.000	6055.267	18.090	0.000
35.	9510.213	-10.760	6463.665	6.700	0.000	6130.149	18.110	0.000
36.	9478.696	-10.760	6476.615	6.390	0.000	6165.192	18.050	0.000
37.	9447.351	-10.720	6488.964	6.070	0.000	6200.222	17.900	0.000
38.	9416.307	-10.630	6500.701	5.750	-0.000	6235.054	17.670	0.000
39.	9385.709	-10.490	6511.815	5.430	0.000	6269.497	17.350	0.000
40.	9355.708	-10.290	6522.294	5.100	0.000	6303.352	16.930	0.000
41.	9326.465	-10.040	6532.131	4.770	0.000	6336.915	16.420	0.000
42.	9298.148	-9.720	6541.315	4.440	0.000	6368.475	15.820	0.000
43.	9270.935	-9.340	6549.839	4.100	0.000	6399.313	15.110	0.000
44.	9245.008	-8.860	6557.694	3.760	0.000	6428.711	14.300	0.000
45.	9220.553	-8.360	6564.873	3.420	0.000	6456.446	13.390	0.000
46.	9197.760	-7.770	6571.370	3.070	-0.000	6482.295	12.380	0.000
47.	9176.618	-7.100	6577.179	2.720	0.000	6506.041	11.270	0.000
48.	9157.912	-6.360	6582.294	2.360	-0.000	6521.473	10.060	0.000
49.	9141.219	-5.560	6586.711	2.030	0.000	6546.308	8.750	-0.000

110-PLANE MAGNESIUM OXIDE

	LPH12	LPH13	FSRVEL	FSPH12	FSPH13	SSKVEL	SSPH12	SSPH13
50.	9126.904	0.000	6590.426	1.670	0.000	6562.602	7.370	-0.000
51.	9115.115	0.000	6593.437	1.320	0.000	6575.989	5.900	-0.000
52.	9105.961	0.000	6595.739	.970	-0.000	6586.286	4.370	-0.000
53.	9099.602	0.000	6597.330	.620	0.000	6593.505	2.800	-0.000
54.	9096.052	0.000	6598.211	.260	0.000	6597.521	1.190	-0.000
55.	9095.373	0.000	6598.379	-.050	-0.000	6598.290	-.430	-0.000
56.	9097.571	0.000	6597.835	-.450	-0.000	6595.804	-2.040	0.000
57.	9102.621	0.000	6596.579	-.800	0.000	6593.089	-3.640	-0.000
58.	9110.466	0.000	6594.611	-1.160	-0.000	6591.212	-5.190	-0.000
59.	9121.017	0.000	6591.935	-1.510	-0.000	6589.269	-6.660	-0.000
60.	9134.156	0.000	6588.552	-1.860	0.000	6584.386	-8.110	-0.000
61.	9145.747	0.000	6584.466	-2.210	-0.000	6578.726	-9.550	-0.000
62.	9167.630	0.000	6579.666	-2.560	-0.000	6576.456	-10.710	-0.000
63.	9187.633	0.000	6574.198	-2.910	-0.000	6493.779	-11.870	-0.000
64.	9209.576	0.000	6568.025	-3.250	-0.000	6486.695	-12.930	-0.000
65.	9233.270	0.000	6561.167	-3.600	-0.000	6442.023	-13.660	-0.000
66.	9256.526	0.000	6553.630	-3.940	-0.000	6413.382	-14.740	-0.000
67.	9285.155	0.000	6545.421	-4.280	0.000	6383.196	-15.490	-0.000
68.	9312.973	0.000	6536.566	-4.610	-0.000	6351.686	-16.150	-0.000
69.	9341.800	0.000	6527.016	-4.940	0.000	6339.070	-16.700	-0.000
70.	9371.464	0.000	6516.841	-5.270	0.000	6295.562	-17.160	-0.000
71.	9401.806	0.000	6506.025	-5.600	-0.000	6251.371	-17.530	-0.000
72.	9432.652	0.000	6494.591	-5.920	0.000	6216.690	-17.610	-0.000
73.	9463.873	0.000	6482.519	-6.240	-0.000	6191.739	-17.590	-0.000
74.	9495.325	0.000	6469.851	-6.550	0.000	6166.600	-16.690	-0.000
75.	9526.879	0.000	6456.595	-6.860	-0.000	6111.700	-16.110	-0.000
76.	9558.414	0.000	6442.744	-7.160	0.000	6076.973	-16.640	-0.000
77.	9589.819	0.000	6428.331	-7.460	-0.000	6042.662	-17.090	-0.000
78.	9620.989	0.000	6413.363	-7.750	0.000	6006.926	-17.670	-0.000
79.	9651.827	0.000	6397.855	-8.040	-0.000	5975.312	-17.300	-0.000
80.	9682.245	0.000	6381.821	-8.320	0.000	5943.764	-16.900	-0.000
81.	9712.160	0.000	6365.277	-8.600	-0.000	5912.016	-16.520	-0.000
82.	9741.496	0.000	6348.240	-8.860	0.000	5882.597	-15.990	-0.000
83.	9770.183	0.000	6330.726	-9.120	-0.000	5853.627	-15.360	-0.000
84.	9798.156	0.000	6312.752	-9.380	0.000	5826.418	-14.710	-0.000
85.	9825.356	0.000	6294.338	-9.620	-0.000	5800.477	-13.960	-0.000
86.	9851.730	0.000	6275.500	-9.860	0.000	5775.103	-13.150	-0.000
87.	9877.227	0.000	6256.260	-10.090	-0.000	5753.366	-12.260	-0.000
88.	9901.803	0.000	6236.636	-10.310	0.000	5732.410	-11.350	-0.000
89.	9925.417	0.000	6216.648	-10.530	-0.000	5713.250	-10.360	-0.000
90.	9948.032	0.000	6196.319	-10.730	0.000	5695.976	-9.320	-0.000
91.	9969.615	0.000	6175.669	-10.920	-0.000	5680.645	-8.230	-0.000
92.	9990.137	0.000	6154.720	-11.110	0.000	5667.311	-7.100	-0.000
93.	10009.573	0.000	6133.495	-11.260	-0.000	5656.017	-5.930	-0.000
94.	10027.898	0.000	6112.018	-11.440	0.000	5646.798	-4.740	-0.000
95.	10045.096	0.000	6090.311	-11.600	-0.000	5639.682	-3.520	-0.000
96.	10061.146	0.000	6068.399	-11.740	0.000	5634.686	-2.250	-0.000
97.	10076.842	0.000	6046.307	-11.870	-0.000	5631.820	-1.050	-0.000
98.	10099.760	0.000	6024.059	-11.980	0.000	5631.066	-.190	-0.000
99.	10102.319	0.000	6001.661	-12.090	-0.000	5632.474	1.430	-0.000

BULK

110-PLANE MAGNESIUM OXIDE

BULK

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	10113.691	3.500	0.000	5979.199	-12.160	0.000	5635.360	2.050	-0.000
101.	10123.062	3.110	-0.000	5956.640	-12.260	0.000	5641.569	3.050	-0.000
102.	10132.894	2.730	0.000	5934.030	-12.320	0.000	5649.212	5.020	-0.000
103.	10140.730	2.350	0.000	5911.396	-12.370	0.000	5656.972	6.160	-0.000
104.	10147.399	1.970	0.000	5888.766	-12.410	0.000	5670.500	7.250	-0.000
105.	10152.910	1.600	0.000	5866.167	-12.430	0.000	5684.343	8.300	-0.000
106.	10157.275	1.230	-0.000	5843.626	-12.440	0.000	5699.439	9.310	-0.000
107.	10160.511	.860	-0.000	5821.177	-12.430	0.000	5716.620	10.250	-0.000
108.	10162.637	.510	0.000	5798.843	-12.410	0.000	5735.510	11.140	-0.000
109.	10163.673	.160	0.000	5776.653	-12.370	0.000	5756.030	11.970	-0.000
110.	10163.644	-.160	0.000	5754.636	-12.310	-0.000	5778.090	12.740	0.000
111.	10162.578	-.510	0.000	5732.825	-12.240	0.000	5801.600	13.440	0.000
112.	10160.506	-.860	0.000	5711.245	-12.150	-0.000	5826.460	14.060	0.000
113.	10157.461	-1.140	0.000	5689.926	-12.040	0.000	5852.569	14.650	0.000
114.	10153.401	-1.430	-0.000	5668.697	-11.910	-0.000	5879.619	15.150	0.000
115.	10148.606	-1.720	0.000	5648.187	-11.770	0.000	5908.090	15.560	0.000
116.	10142.879	-1.990	0.000	5627.825	-11.610	0.000	5937.291	15.950	0.000
117.	10136.349	-2.240	0.000	5607.640	-11.430	0.000	5967.276	16.240	0.000
118.	10129.064	-2.460	0.000	5588.661	-11.230	0.000	5997.936	16.470	0.000
119.	10121.080	-2.650	0.000	5569.115	-11.010	0.000	6029.140	16.630	0.000
120.	10112.454	-2.900	0.000	5550.431	-10.760	0.000	6060.761	16.730	0.000
121.	10103.247	-3.000	-0.000	5532.235	-10.530	0.000	6092.660	16.750	0.000
122.	10093.523	-3.240	0.000	5514.556	-10.250	0.000	6124.728	16.710	0.000
123.	10083.351	-3.370	0.000	5497.420	-9.960	0.000	6156.805	16.600	0.000
124.	10072.801	-3.450	-0.000	5480.853	-9.660	0.000	6188.761	16.450	0.000
125.	10061.949	-3.500	0.000	5464.880	-9.330	0.000	6220.459	16.190	0.000
126.	10050.871	-3.640	0.000	5449.526	-8.960	0.000	6251.759	15.990	0.000
127.	10039.646	-3.660	0.000	5434.816	-8.620	-0.000	6282.522	15.520	-0.000
128.	10028.363	-3.650	0.000	5420.771	-8.240	0.000	6312.687	15.090	0.000
129.	10017.101	-3.670	0.000	5407.416	-7.850	0.000	6341.875	14.590	0.000
130.	10005.944	-3.630	0.000	5394.770	-7.430	0.000	6370.187	14.030	0.000
131.	9994.994	-3.550	0.000	5382.856	-7.000	0.000	6397.406	13.410	0.000
132.	9984.324	-3.450	0.000	5371.691	-6.560	-0.000	6423.396	12.730	-0.000
133.	9974.028	-3.310	0.000	5361.295	-6.100	0.000	6446.032	12.000	0.000
134.	9964.194	-3.150	-0.000	5351.684	-5.630	0.000	6471.179	11.200	0.000
135.	9954.906	-2.960	0.000	5342.875	-5.150	0.000	6492.717	10.350	0.000
136.	9946.266	-2.740	0.000	5334.883	-4.650	0.000	6512.531	9.450	0.000
137.	9938.294	-2.500	-0.000	5327.720	-4.150	-0.000	6530.510	8.500	0.000
138.	9931.123	-2.230	-0.000	5321.598	-3.630	-0.000	6546.553	7.500	0.000
139.	9924.801	-1.940	-0.000	5315.930	-3.110	-0.000	6560.568	6.460	0.000
140.	9919.390	-1.630	-0.000	5311.323	-2.580	-0.000	6572.673	5.390	0.000
141.	9914.941	-1.310	0.000	5307.586	-2.040	0.000	6582.197	4.290	0.000
142.	9911.499	-.970	0.000	5304.725	-1.500	0.000	6594.683	3.160	0.000
143.	9908.080	-.620	0.000	5302.745	-.950	0.000	6599.885	2.010	0.000
144.	9904.704	-.260	0.000	5301.649	-.400	0.000	6597.771	.860	0.000
145.	9901.506	.090	0.000	5301.440	.140	0.000	6596.322	-.310	-0.000
146.	9908.334	.450	0.000	5302.118	.690	0.000	6596.537	-1.470	-0.000
147.	9910.234	.810	0.000	5303.680	1.240	0.000	6592.425	-2.620	0.000
148.	9913.166	1.150	0.000	5306.126	1.760	0.000	6586.813	-3.760	0.000
149.	9917.167	1.480	0.000	5309.450	2.320	0.000	6577.336	-4.870	-0.000

118-PLANE MAGNESIUM OXIDE

BULK

	LMQVEL	LPM12	LPM13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
150.	9922.130	1.600	0.000	5313.648	2.860	0.000	6566.454	-5.960	0.000
151.	9928.030	2.100	0.000	5318.710	3.390	0.000	6553.426	-7.020	0.000
152.	9934.806	2.360	0.000	5324.630	3.910	0.000	6538.329	-8.030	0.000
153.	9942.400	2.630	0.000	5331.386	4.420	0.000	6521.252	-9.000	0.000
154.	9950.735	2.860	0.000	5339.000	4.920	0.000	6502.291	-9.930	0.000
155.	9959.737	3.070	0.000	5347.426	5.410	0.000	6481.553	-10.810	0.000
156.	9969.324	3.240	0.000	5356.660	5.880	0.000	6459.150	-11.630	0.000
157.	9979.413	3.390	0.000	5366.667	6.350	0.000	6435.203	-12.390	0.000
158.	9989.917	3.510	0.000	5377.491	6.800	0.000	6409.836	-13.100	0.000
159.	10000.746	3.520	0.000	5389.054	7.230	0.000	6383.179	-13.750	0.000
160.	10011.818	3.650	0.000	5401.387	7.650	0.000	6355.366	-14.340	0.000
161.	10023.040	3.650	0.000	5413.350	8.060	0.000	6326.532	-14.860	0.000
162.	10034.324	3.650	0.000	5425.102	8.440	0.000	6296.815	-15.320	0.000
163.	10045.587	3.660	0.000	5442.501	8.810	0.000	6266.355	-15.720	0.000
164.	10056.743	3.610	0.000	5457.554	9.170	0.000	6235.231	-16.060	0.000
165.	10067.712	3.530	0.000	5473.236	9.500	0.000	6203.763	-16.320	0.000
166.	10078.414	3.430	0.000	5489.526	9.820	0.000	6171.911	-16.530	0.000
167.	10088.774	3.300	0.000	5506.399	10.120	0.000	6139.674	-16.670	0.000
168.	10098.718	3.150	0.000	5523.825	10.400	0.000	6107.790	-16.740	0.000
169.	10108.177	2.920	0.000	5541.780	10.660	0.000	6075.754	-16.750	0.000
170.	10117.865	2.790	0.000	5560.237	10.910	0.000	6044.021	-16.800	0.000
171.	10125.360	2.560	0.000	5579.158	11.130	0.000	6012.504	-16.860	0.000
172.	10133.001	2.350	0.000	5598.517	11.340	0.000	5981.672	-16.960	0.000
173.	10139.894	2.110	0.000	5618.344	11.530	0.000	5951.353	-17.100	0.000
174.	10146.006	1.650	0.000	5638.531	11.700	0.000	5921.770	-17.260	0.000
175.	10151.269	1.570	0.000	5659.080	11.850	0.000	5893.046	-17.360	0.000
176.	10155.697	1.260	0.000	5679.962	11.980	0.000	5865.296	-17.490	0.000
177.	10159.188	.980	0.000	5701.146	12.100	0.000	5838.635	-17.630	0.000
178.	10161.724	.660	0.000	5722.609	12.200	0.000	5813.172	-17.750	0.000
179.	10163.266	.340	0.000	5744.315	12.260	0.000	5788.912	-17.860	0.000
180.	10163.790	0.800	0.000	5766.236	12.340	0.000	5766.256	-17.940	0.000

X-PLANE (YZ-PLANE) QUARTZ

BULK

	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
0.	5996.013	23.870	0.000	4314.379	-25.810	-0.000	3913.976	-24.000	0.000
1.	6061.602	23.250	0.000	4278.216	-25.670	-0.000	3683.692	-23.960	0.000
2.	6086.602	22.810	0.000	4262.821	-25.460	-0.000	3553.694	-23.520	0.000
3.	6130.948	22.350	0.000	4207.676	-25.220	-0.000	3524.045	-23.620	0.000
4.	6174.585	21.870	0.000	4173.675	-24.900	-0.000	3794.775	-23.690	0.000
5.	6217.661	21.380	0.000	4140.091	-24.510	-0.000	3765.935	-23.520	0.000
6.	6259.530	20.870	0.000	4107.604	-24.060	-0.000	3737.571	-23.310	0.000
7.	6300.766	20.350	0.000	4076.889	-23.550	-0.000	3704.731	-23.060	0.000
8.	6341.076	19.810	0.000	4045.616	-22.970	-0.000	3682.460	-22.760	0.000
9.	6380.477	19.270	0.000	4016.260	-22.320	-0.000	3655.606	-22.420	0.000
10.	6418.516	18.710	0.000	3988.081	-21.610	-0.000	3629.821	-22.030	0.000
11.	6456.362	18.150	0.000	3961.147	-20.820	-0.000	3604.247	-21.590	0.000
12.	6492.785	17.560	0.000	3935.519	-19.970	-0.000	3564.034	-21.110	0.000
13.	6528.157	17.000	0.000	3911.255	-19.040	-0.000	3556.329	-20.560	0.000
14.	6562.451	16.420	0.000	3888.413	-18.050	-0.000	3533.475	-19.570	0.000
15.	6595.644	15.830	0.000	3867.043	-16.990	-0.000	3511.530	-19.320	0.000
16.	6627.712	15.230	0.000	3847.197	-15.850	-0.000	3470.527	-18.010	0.000
17.	6658.635	14.630	0.000	3828.920	-14.660	-0.000	3470.516	-17.650	0.000
18.	6688.391	14.030	0.000	3812.254	-13.400	-0.000	3451.530	-17.030	0.000
19.	6716.964	13.420	0.000	3797.237	-12.080	-0.000	3433.636	-16.150	0.000
20.	6744.355	12.810	0.000	3783.903	-10.700	-0.000	3416.851	-15.210	0.000
21.	6770.465	12.200	0.000	3772.281	-9.260	-0.000	3390.946	-14.220	0.000
22.	6795.411	11.580	0.000	3762.396	-7.610	-0.000	3361.614	-13.170	0.000
23.	6819.085	10.960	0.000	3754.267	-6.310	-0.000	3363.569	-12.070	0.000
24.	6841.505	10.340	0.000	3747.905	-4.760	-0.000	3351.614	-10.520	0.000
25.	6862.661	9.720	0.000	3743.332	-3.230	-0.000	3350.591	-9.720	0.000
26.	6882.555	9.100	0.000	3740.539	-1.670	-0.000	3333.574	-8.470	0.000
27.	6901.123	8.470	0.000	3739.530	-1.100	-0.000	3326.315	-7.150	0.000
28.	6918.417	7.850	0.000	3740.299	1.450	-0.000	3321.631	-5.870	0.000
29.	6934.411	7.220	0.000	3742.833	2.950	-0.000	3317.736	-4.530	0.000
30.	6949.101	6.560	0.000	3747.116	4.500	-0.000	3315.241	-3.160	0.000
31.	6962.403	5.980	0.000	3753.126	5.960	-0.000	3314.152	-1.770	0.000
32.	6974.554	5.360	0.000	3760.836	7.420	-0.000	3314.474	-0.360	0.000
33.	6985.312	4.740	0.000	3770.213	8.810	-0.000	3316.205	1.020	0.000
34.	6994.756	4.120	0.000	3781.222	10.150	-0.000	3319.341	2.410	0.000
35.	7002.893	3.500	0.000	3793.620	11.420	-0.000	3323.676	3.790	0.000
36.	7009.719	2.890	0.000	3807.964	12.640	-0.000	3329.748	5.150	0.000
37.	7015.241	2.260	0.000	3823.682	13.760	-0.000	3337.094	6.490	0.000
38.	7019.662	1.670	0.000	3840.683	14.860	-0.000	3345.744	7.800	0.000
39.	7022.591	1.070	0.000	3859.148	15.860	-0.000	3355.726	9.070	0.000
40.	7024.834	.470	0.000	3878.939	16.790	-0.000	3367.023	10.300	0.000
41.	7026.401	-.120	0.000	3899.992	17.650	-0.000	3374.600	11.490	0.000
42.	7027.503	-0.710	0.000	3922.242	18.440	-0.000	3379.600	12.620	0.000
43.	7028.153	-1.300	0.000	3945.620	19.150	-0.000	3393.430	13.710	0.000
44.	7027.964	-1.870	0.000	3970.855	19.600	-0.000	3406.460	14.740	0.000
45.	7026.353	-2.440	0.000	3995.475	20.370	-0.000	3424.717	15.710	0.000
46.	7007.536	-3.000	0.000	4021.085	20.670	-0.000	3442.101	16.630	0.000
47.	7000.536	-3.550	0.000	4048.966	21.300	-0.000	3460.596	17.490	0.000
48.	6992.374	-4.100	0.000	4076.887	21.670	-0.000	3480.159	18.300	0.000
49.	6983.071	-4.630	0.000	4105.462	21.970	-0.000	3500.749	19.040	0.000

X-PLANE (YZ-PLANE) QUARTZ

	LNVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
50.	6972.654	-5.150	0.000	4134.673	22.210	-0.000	3522.321	19.730	-0.000
51.	6961.153	-5.660	0.000	4164.376	22.381	-0.000	3544.631	20.360	-0.000
52.	6948.597	-6.150	0.000	4194.508	22.500	-0.000	3568.232	20.940	-0.000
53.	6935.021	-6.630	0.000	4224.985	22.550	-0.000	3592.479	21.460	-0.000
54.	6920.462	-7.100	0.000	4255.715	22.540	-0.000	3617.522	21.940	-0.000
55.	6904.956	-7.540	0.000	4286.624	22.480	-0.000	3643.316	22.360	-0.000
56.	6888.553	-7.970	0.000	4317.608	22.360	-0.000	3669.612	22.730	-0.000
57.	6871.293	-8.380	0.000	4348.583	22.180	-0.000	3696.961	23.050	-0.000
58.	6853.230	-8.770	-0.000	4379.454	21.940	-0.000	3724.715	23.330	-0.000
59.	6834.416	-9.130	-0.000	4410.126	21.640	0.000	3753.026	23.570	-0.000
60.	6814.911	-9.470	-0.000	4440.593	21.290	0.000	3781.647	23.760	-0.000
61.	6794.777	-9.770	-0.000	4470.866	20.870	0.000	3811.129	23.920	-0.000
62.	6774.064	-10.050	-0.000	4499.971	20.400	0.000	3840.826	24.030	-0.000
63.	6752.905	-10.290	-0.000	4528.823	19.660	0.000	3870.632	24.110	-0.000
64.	6731.310	-10.490	-0.000	4557.025	19.250	0.000	3901.279	24.150	-0.000
65.	6709.406	-10.660	-0.000	4584.374	18.540	0.000	3931.944	24.160	-0.000
66.	6687.265	-10.780	-0.000	4610.766	17.840	0.000	3962.841	24.140	-0.000
67.	6664.985	-10.860	-0.000	4636.142	17.030	0.000	3993.927	24.090	-0.000
68.	6642.671	-10.890	-0.000	4660.319	16.150	0.000	4025.160	24.010	-0.000
69.	6620.431	-10.860	-0.000	4683.193	15.150	0.000	4056.496	23.900	-0.000
70.	6598.378	-10.780	-0.000	4704.634	14.140	0.000	4087.695	23.770	-0.000
71.	6576.630	-10.640	-0.000	4724.512	13.010	0.000	4114.316	23.610	-0.000
72.	6555.309	-10.430	-0.000	4742.696	11.800	0.000	4150.722	23.430	-0.000
73.	6534.540	-10.170	-0.000	4759.051	10.500	0.000	4182.072	23.220	-0.000
74.	6514.450	-9.830	-0.000	4773.449	9.120	0.000	4213.330	22.990	-0.000
75.	6495.162	-9.440	-0.000	4785.760	7.660	0.000	4244.460	22.740	-0.000
76.	6476.796	-8.980	-0.000	4795.864	6.110	0.000	4275.426	22.480	-0.000
77.	6459.475	-8.460	-0.000	4803.646	4.490	0.000	4306.194	22.190	-0.000
78.	6443.298	-7.860	-0.000	4809.010	2.810	0.000	4336.731	21.890	-0.000
79.	6428.362	-7.260	0.000	4811.865	1.070	0.000	4367.004	21.570	-0.000
80.	6414.746	-6.590	0.000	4812.142	-7.000	0.000	4396.982	21.230	-0.000
81.	6402.512	-5.850	0.000	4809.794	-2.500	0.000	4425.634	20.880	-0.000
82.	6391.700	-5.170	0.000	4806.795	-4.310	0.000	4453.931	20.520	-0.000
83.	6382.332	-4.440	0.000	4797.145	-6.120	0.000	4481.865	20.140	-0.000
84.	6374.403	-3.710	0.000	4786.866	-7.890	0.000	4513.347	19.750	-0.000
85.	6367.869	-3.000	0.000	4774.809	-9.620	0.000	4541.411	19.350	-0.000
86.	6362.744	-2.310	0.000	4759.645	-11.250	0.000	4569.012	18.940	-0.000
87.	6358.903	-1.660	0.000	4740.070	-12.900	0.000	4596.125	18.510	-0.000
88.	6356.284	-1.050	0.000	4720.798	-14.420	0.000	4622.725	18.080	-0.000
89.	6354.791	-0.500	0.000	4698.559	-15.650	0.000	4648.790	17.630	-0.000
90.	6354.316	0.000	0.000	4674.297	-17.100	0.000	4674.237	17.160	-0.000
91.	6354.752	.440	0.000	4648.169	-18.410	-0.000	4699.226	16.720	0.000
92.	6355.974	.810	0.000	4620.335	-19.550	-0.000	4723.555	16.280	0.000
93.	6357.863	1.130	0.000	4590.963	-20.500	-0.000	4747.265	15.760	0.000
94.	6360.301	1.360	0.000	4560.223	-21.510	-0.000	4770.337	15.200	0.000
95.	6363.169	1.570	0.000	4528.285	-22.340	-0.000	4792.722	14.790	0.000
96.	6366.352	1.700	0.000	4495.319	-23.070	-0.000	4814.495	14.290	-0.000
97.	6369.742	1.780	0.000	4461.492	-23.710	-0.000	4835.547	13.760	-0.000
98.	6373.234	1.810	0.000	4426.971	-24.260	-0.000	4855.694	13.270	-0.000
99.	6376.731	1.780	0.000	4391.917	-24.710	-0.000	4875.521	12.750	-0.000

BULK

X-PLANE (Y2-PLANE) QUARTZ

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
100.	6300.140	1.720	0.000	4356.489	-25.070	-0.000	4094.412	12.230	-0.000
101.	6303.375	1.610	0.000	4320.842	-25.340	-0.000	4312.555	11.710	-0.000
102.	6306.356	1.450	0.000	4285.126	-25.520	-0.000	4325.336	11.170	-0.000
103.	6309.014	1.270	0.000	4244.495	-25.610	-0.000	4346.544	10.640	-0.000
104.	6311.276	1.050	0.000	4214.087	-25.610	-0.000	4362.367	10.100	-0.000
105.	6313.081	.800	0.000	4179.046	-25.510	-0.000	4377.394	9.560	-0.000
106.	6314.372	.520	0.000	4144.510	-25.330	-0.000	4391.615	9.010	-0.000
107.	6315.097	.220	0.000	4110.612	-25.050	-0.000	5005.021	8.460	-0.000
108.	6315.209	-.110	0.000	4077.485	-24.660	-0.000	5017.623	7.910	-0.000
109.	6314.664	-.460	0.000	4045.257	-24.200	-0.000	5029.352	7.360	-0.000
110.	6313.423	-.820	0.000	4014.052	-23.630	-0.000	5040.262	6.800	-0.000
111.	6311.450	-1.210	0.000	3983.992	-22.950	-0.000	5050.324	6.240	-0.000
112.	6308.712	-1.610	0.000	3955.195	-22.170	-0.000	5059.534	5.680	-0.000
113.	6305.182	-2.020	0.000	3927.775	-21.260	-0.000	5067.685	5.120	-0.000
114.	6300.832	-2.450	0.000	3901.842	-20.270	-0.000	5075.372	4.550	-0.000
115.	6295.641	-2.890	0.000	3877.501	-19.160	-0.000	5081.941	3.990	-0.000
116.	6289.586	-3.340	0.000	3854.855	-17.930	-0.000	5087.738	3.420	-0.000
117.	6282.652	-3.800	0.000	3833.996	-16.590	-0.000	5092.609	2.850	-0.000
118.	6274.821	-4.270	0.000	3815.021	-15.130	-0.000	5096.602	2.290	-0.000
119.	6266.080	-4.750	0.000	3798.006	-13.570	-0.000	5099.715	1.720	-0.000
120.	6256.416	-5.230	0.000	3783.037	-11.910	-0.000	5101.246	1.150	-0.000
121.	6245.826	-5.720	0.000	3770.180	-10.150	-0.000	5103.294	.580	-0.000
122.	6234.296	-6.210	0.000	3759.499	-8.300	-0.000	5103.759	.010	-0.000
123.	6231.823	-6.710	0.000	3751.052	-6.370	-0.000	5103.341	-.350	-0.000
124.	6228.403	-7.220	0.000	3744.885	-4.360	-0.000	5102.040	-1.120	-0.000
125.	6224.033	-7.720	0.000	3741.040	-2.350	-0.000	5099.658	-1.690	-0.000
126.	6258.714	-8.230	0.000	3739.546	-.270	-0.000	5096.797	-2.250	-0.000
127.	6242.445	-8.740	0.000	3740.427	1.820	-0.000	5092.654	-2.820	-0.000
128.	6225.231	-9.250	0.000	3743.696	3.910	-0.000	5088.047	-3.380	-0.000
129.	6207.875	-9.750	0.000	3749.357	5.960	-0.000	5082.564	-3.940	-0.000
130.	6187.983	-10.260	0.000	3757.405	8.020	-0.000	5075.015	-4.510	-0.000
131.	6167.963	-10.770	0.000	3767.828	10.010	-0.000	5068.404	-5.060	-0.000
132.	6147.024	-11.260	0.000	3780.604	11.930	-0.000	5060.137	-5.620	-0.000
133.	6125.177	-11.760	0.000	3795.702	13.760	-0.000	5051.016	-6.180	-0.000
134.	6102.433	-12.260	0.000	3813.884	15.540	-0.000	5041.055	-6.730	-0.000
135.	6078.807	-12.760	0.000	3832.704	17.210	-0.000	5030.293	-7.280	-0.000
136.	6054.315	-13.270	0.000	3854.507	18.760	-0.000	5018.622	-7.830	-0.000
137.	6028.974	-13.750	0.000	3878.434	20.250	-0.000	5006.160	-8.370	-0.000
138.	6002.806	-14.230	0.000	3904.417	21.600	-0.000	4992.701	-8.920	-0.000
139.	5975.431	-14.700	0.000	3932.362	22.860	-0.000	4978.824	-9.450	-0.000
140.	5948.076	-15.170	0.000	3962.249	24.000	-0.000	4963.962	-9.990	-0.000
141.	5919.566	-15.620	0.000	3993.934	25.040	-0.000	4948.311	-10.520	-0.000
142.	5890.334	-16.050	0.000	4027.346	25.970	-0.000	4931.666	-11.050	-0.000
143.	5860.412	-16.460	0.000	4062.386	26.810	-0.000	4914.699	-11.570	-0.000
144.	5829.841	-16.860	0.000	4098.960	27.540	-0.000	4896.763	-12.090	-0.000
145.	5798.663	-17.270	0.000	4136.952	28.170	-0.000	4878.091	-12.600	-0.000
146.	5768.926	-17.630	0.000	4176.253	28.710	-0.000	4858.645	-13.110	-0.000
147.	5734.653	-17.970	0.000	4216.741	29.140	-0.000	4838.590	-13.620	-0.000
148.	5702.025	-18.270	0.000	4258.266	29.490	-0.000	4817.791	-14.110	-0.000
149.	5669.001	-18.530	0.000	4300.746	29.730	-0.000	4796.313	-14.600	-0.000

BULK

X-PLANE (YZ-PLANE) QUARTZ									
	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13	
150.	-18.750	0.000	4343.972	24.870	-0.000	4776.172	-15.090	-0.000	
151.	-18.850	0.000	4387.767	25.110	-0.000	4751.366	-15.570	-0.000	
152.	-18.960	0.000	4431.997	25.820	-0.000	4727.972	-16.040	-0.000	
153.	-18.930	0.000	4476.370	25.590	-0.000	4703.948	-16.500	-0.000	
154.	-18.760	0.000	4520.632	25.200	-0.000	4679.333	-16.960	-0.000	
155.	-18.400	0.000	4564.441	25.610	-0.000	4654.147	-17.410	-0.000	
156.	-17.800	0.000	4607.369	21.750	0.000	4628.411	-17.840	-0.000	
157.	-16.850	0.000	4646.857	26.550	0.000	4602.146	-18.270	-0.000	
158.	-15.420	0.000	4686.173	24.870	0.000	4575.374	-16.690	-0.000	
159.	-13.340	0.000	4724.357	22.550	0.000	4546.118	-19.100	-0.000	
160.	-10.410	0.000	4756.180	19.360	0.000	4520.432	-19.500	-0.000	
161.	-6.470	0.000	4782.169	15.120	0.000	4492.850	-19.890	-0.000	
162.	-1.540	0.000	4800.770	9.790	0.000	4463.668	-20.260	-0.000	
163.	3.970	0.000	4810.752	3.640	0.000	4434.743	-20.620	-0.000	
164.	9.410	0.000	4811.589	-2.500	0.000	4405.441	-20.970	-0.000	
165.	14.120	0.000	4803.726	-8.050	0.000	4375.611	-21.310	-0.000	
166.	17.600	0.000	4788.344	-12.580	0.000	4345.882	-21.620	-0.000	
167.	20.490	0.000	4766.920	-16.060	0.000	4315.664	-21.930	-0.000	
168.	22.360	0.000	4740.866	-18.670	0.000	4285.247	-22.220	-0.000	
169.	23.620	1.000	4711.355	-20.600	0.000	4254.834	-22.490	-0.000	
170.	24.450	0.000	4679.300	-22.050	0.000	4223.787	-22.740	-0.000	
171.	24.950	0.000	4645.394	-23.140	0.000	4192.630	-22.970	-0.000	
172.	25.220	0.000	4610.156	-23.960	0.000	4161.760	-23.160	-0.000	
173.	25.300	0.000	4573.964	-24.550	0.000	4130.637	-23.370	-0.000	
174.	25.300	0.000	4537.184	-25.060	0.000	4099.473	-23.540	-0.000	
175.	25.170	-0.000	4500.003	-25.410	0.000	4068.315	-23.680	-0.000	
176.	24.970	-0.000	4462.639	-25.650	0.000	4037.159	-23.800	-0.000	
177.	24.710	-0.000	4425.260	-25.600	0.000	4006.167	-23.890	-0.000	
178.	24.400	-0.000	4388.006	-25.670	0.000	3975.256	-23.960	-0.000	
179.	24.050	-0.000	4351.011	-25.870	0.000	3944.515	-24.000	-0.000	
180.	23.670	-0.000	4314.379	-25.610	0.000	3913.976	-24.000	-0.000	

BULK

V-PLANE (X7-PLANE) QUAD77

	LMCHFL	LOW112	LOW113	FSPVEL	FSPH12	FSPH13	SSPVEL	SSPH12	SSPH13
0.	5784.629	0.000	0.000	5894.814	0.000	0.000	3794.285	0.000	0.000
1.	5767.626	1.400	2.770	5896.378	-4.400	-2.920	3794.014	1.450	-1.450
2.	5756.229	6.550	5.374	5886.264	-8.510	-5.550	3791.211	2.900	-2.900
3.	5770.202	9.244	7.658	5870.023	-12.160	-8.090	3784.854	4.340	-4.340
4.	5793.660	11.500	9.534	5844.307	-15.260	-10.150	3769.494	5.730	-5.730
5.	5411.119	13.240	11.170	5822.217	-17.920	-11.950	3716.657	7.120	-7.220
6.	5836.377	14.540	12.438	4992.241	-19.920	-13.230	3724.895	8.660	-8.680
7.	5853.762	15.480	13.410	4959.207	-21.620	-14.330	3737.704	9.750	-9.950
8.	5921.871	16.120	14.210	4934.471	-23.000	-15.210	3744.374	10.900	-11.260
9.	5923.064	16.530	14.410	4886.502	-24.130	-15.910	3756.374	12.100	-12.530
10.	5954.082	16.760	15.290	4847.606	-25.950	-16.460	3769.664	13.320	-13.750
11.	5985.569	16.840	15.550	4807.523	-25.810	-16.900	3784.203	14.390	-16.930
12.	5017.277	15.820	15.940	4766.519	-26.430	-17.250	3799.957	15.390	-16.070
13.	5069.003	16.701	16.150	4724.495	-26.940	-17.510	3816.857	16.330	-17.150
14.	5080.581	16.510	16.330	4682.801	-27.340	-17.700	3834.877	17.200	-18.190
15.	5111.877	16.260	16.450	4640.443	-27.650	-17.840	3852.943	17.900	-19.100
16.	5162.775	15.960	16.550	4597.947	-27.880	-17.930	3874.085	18.710	-20.120
17.	5173.102	15.630	16.610	4555.584	-28.020	-17.960	3894.904	19.360	-21.020
18.	5203.017	15.250	16.650	4513.395	-28.090	-17.950	3916.846	19.930	-21.890
19.	5232.211	14.660	16.640	4471.552	-28.070	-17.890	3939.471	20.410	-22.590
20.	5260.705	14.430	16.590	4430.205	-27.960	-17.780	3962.746	20.810	-23.470
21.	5288.444	13.900	16.580	4389.596	-27.760	-17.530	3986.800	21.190	-24.210
22.	5315.595	13.540	16.460	4349.519	-27.440	-17.430	4011.064	21.590	-24.920
23.	5341.508	13.160	16.510	4310.723	-26.990	-17.180	4035.764	21.970	-25.580
24.	5366.752	12.580	16.600	4273.047	-26.380	-16.940	4060.626	22.370	-26.260
25.	5391.097	12.090	16.560	4236.437	-25.560	-16.520	4085.414	22.900	-26.190
26.	5414.517	11.580	16.510	4202.434	-24.460	-15.110	4109.830	23.420	-27.500
27.	5436.988	11.070	16.450	4170.283	-22.960	-15.560	4133.662	19.490	-28.080
28.	5458.490	10.560	16.400	4141.002	-20.890	-15.190	4155.725	18.030	-28.590
29.	5479.004	10.040	16.310	4115.448	-17.990	-14.780	4175.749	15.770	-29.710
30.	5498.515	9.510	16.260	4094.787	-13.950	-14.550	4192.519	12.450	-29.710
31.	5517.010	8.980	16.190	4080.434	-8.560	-14.580	4204.525	7.870	-29.060
32.	5534.477	8.450	16.110	4073.719	-2.100	-15.340	4210.505	2.810	-28.420
33.	5550.907	7.920	16.010	4075.234	4.450	-16.510	4209.492	-3.270	-27.290
34.	5566.292	7.190	15.950	4084.395	9.970	-17.950	4203.243	-7.840	-25.810
35.	5580.626	6.860	15.860	4099.740	14.030	-19.350	4192.177	-10.940	-24.250
36.	5593.986	5.320	14.770	4119.625	16.770	-20.570	4178.221	-12.720	-22.760
37.	5596.127	5.790	15.690	4142.672	18.550	-21.550	4162.410	-13.580	-21.180
38.	5617.291	5.260	15.590	4167.877	19.690	-22.330	4146.962	-13.590	-20.130
39.	5627.397	4.730	15.470	4194.540	20.390	-22.940	4131.384	-13.190	-18.970
40.	5636.447	4.210	15.370	4222.175	20.800	-23.420	4116.563	-12.450	-17.880
41.	5644.446	3.690	15.250	4250.441	21.010	-23.780	4102.842	-11.660	-16.850
42.	5651.400	3.170	15.140	4279.088	21.070	-24.050	4090.465	-10.250	-15.950
43.	5657.314	2.660	15.010	4307.927	21.010	-24.250	4079.504	-8.990	-14.980
44.	5662.200	2.150	14.890	4335.412	20.470	-24.480	4069.404	-7.420	-13.920
45.	5666.066	1.650	14.750	4365.623	20.570	-24.490	4060.949	-5.850	-12.970
46.	5668.925	1.160	14.610	4394.260	20.400	-24.530	4053.315	-4.220	-12.030
47.	5670.793	.680	14.470	4422.639	20.090	-24.540	4047.553	-2.530	-11.090
48.	5671.643	.200	14.310	4450.642	19.730	-24.510	4043.599	-.600	-10.160
49.	5671.616	-.270	14.150	4478.322	19.330	-24.440	4051.773	.900	-.920

Y-PLANE (XZ-PLANE) QUARTY

	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	CSRVEL	SSPM12	SSPM13
50.	5677.689	-0.729	13.940	4505.495	18.980	-24.350	7653.745	2.644	-8.320
51.	5668.696	-1.170	13.940	4532.142	18.430	-24.420	7657.733	4.490	-7.420
52.	5665.879	-1.609	13.610	4558.207	17.940	-24.070	7663.605	6.190	-6.539
53.	5662.188	-2.029	13.610	4583.634	17.420	-23.490	7671.381	7.750	-5.550
54.	5657.668	-2.430	13.230	4608.381	16.850	-23.590	7681.033	9.150	-4.800
55.	5652.341	-2.829	12.940	4632.387	16.240	-23.450	7692.574	10.490	-3.969
56.	5646.240	-3.209	12.750	4655.505	15.699	-23.190	7705.912	12.159	-3.159
57.	5639.400	-3.559	12.510	4677.949	15.059	-22.910	7720.445	13.750	-2.370
58.	5631.861	-3.909	12.240	4699.447	14.390	-22.609	7737.571	15.050	-1.520
59.	5623.663	-4.219	11.950	4720.053	13.709	-22.269	7755.927	16.280	-0.600
60.	5614.850	-4.510	11.570	4739.639	12.990	-21.890	7775.849	17.420	-0.210
61.	5605.467	-4.790	11.350	4758.194	12.250	-21.500	7797.263	18.470	0.330
62.	5595.565	-5.040	11.040	4775.674	11.480	-21.070	7820.094	19.439	1.040
63.	5585.195	-5.260	10.630	4792.028	10.580	-20.620	7844.277	20.300	1.510
64.	5574.412	-5.460	10.330	4807.209	9.659	-20.130	7869.717	21.099	2.160
65.	5563.272	-5.630	9.950	4821.158	8.699	-19.620	7896.335	21.799	2.539
66.	5551.836	-5.770	9.550	4833.858	7.620	-19.070	7924.045	22.400	3.070
67.	5540.105	-5.890	9.130	4845.231	6.430	-18.490	7952.761	22.930	3.470
68.	5528.126	-5.980	8.710	4855.240	5.209	-17.890	7982.599	23.389	3.740
69.	5515.897	-6.012	8.260	4863.840	3.909	-17.230	8012.842	23.750	4.130
70.	5504.403	-6.029	7.790	4870.945	2.530	-16.550	8044.825	24.069	4.390
71.	5492.456	-6.000	7.290	4876.572	1.240	-15.849	8075.844	24.290	4.519
72.	5480.512	-5.940	6.790	4880.742	0.260	-15.100	8104.205	24.459	4.790
73.	5468.941	-5.850	6.270	4883.375	1.179	-14.320	8131.015	24.550	4.910
74.	5457.512	-5.720	5.750	4884.199	0.070	-13.520	8154.174	24.570	5.000
75.	5446.193	-5.550	5.220	4883.442	-1.040	-12.690	8174.592	24.539	5.039
76.	5435.653	-5.350	4.700	4881.100	-2.170	-11.840	8191.167	24.439	5.030
77.	5425.355	-5.129	4.170	4877.032	-3.319	-10.970	8204.805	24.270	4.979
78.	5415.581	-4.860	3.660	4871.264	-4.450	-10.090	8204.819	24.050	4.929
79.	5406.331	-4.570	3.150	4863.789	-5.580	-9.190	8211.884	23.779	4.729
80.	5397.720	-4.249	2.679	4854.607	-6.759	-8.299	8215.100	23.440	4.539
81.	5389.776	-3.899	2.210	4843.725	-7.900	-7.380	8219.054	23.050	4.280
82.	5382.548	-3.520	1.790	4831.158	-9.030	-6.480	8224.559	22.509	4.009
83.	5375.074	-3.130	1.330	4816.929	-10.150	-5.599	8232.549	22.180	3.560
84.	5370.393	-2.720	1.060	4801.068	-11.250	-4.710	8243.939	21.559	3.240
85.	5365.534	-2.290	0.710	4783.515	-12.320	-3.859	8254.609	20.959	2.869
86.	5361.524	-1.850	0.270	4764.615	-13.360	-3.010	8264.692	20.299	2.370
87.	5358.383	-1.400	0.000	4744.121	-14.370	-2.210	8293.699	19.590	1.940
88.	5356.129	-0.930	0.000	4722.192	-15.350	-1.440	8311.514	18.839	1.270
89.	5354.771	-0.470	0.000	4698.894	-16.290	-0.700	8328.677	18.039	0.669
90.	5354.310	0.000	0.000	4674.297	-17.180	-0.000	8344.297	17.189	-0.000
91.	5354.771	0.470	0.000	4648.877	-18.030	0.560	8358.894	16.290	-0.700
92.	5356.129	0.930	0.000	4621.414	-18.839	1.270	8372.192	15.350	-1.440
93.	5358.383	1.400	0.000	4593.600	-19.590	1.840	8384.121	14.370	-2.210
94.	5361.524	1.850	0.000	4566.492	-20.290	2.470	8394.615	13.360	-3.010
95.	5365.534	2.290	0.000	4539.608	-20.950	3.060	8403.939	12.250	-3.859
96.	5370.393	2.720	0.000	4513.930	-21.550	3.600	8411.068	11.250	-4.710
97.	5375.074	3.130	0.000	4488.549	-22.180	4.100	8416.929	10.150	-5.599
98.	5382.548	3.520	0.000	4464.615	-22.800	4.580	8421.167	9.030	-6.480
99.	5389.776	3.899	0.000	4440.158	-23.430	5.030	8424.559	7.900	-7.380

Y-PLANE (X-Y-PLANE) QUARTY

	LPHI12	LPHI13	FSPVEL	FSPH12	FSPH13	SSPVEL	SSPH12	SSPH13
107.	5197.220	4.249	4375.130	-23.640	4.530	4854.807	5.750	-8.239
108.	5196.131	4.570	4341.884	-23.770	4.720	4854.783	5.500	-9.190
109.	5195.561	4.860	4308.410	-24.050	4.870	4854.264	4.450	-10.040
110.	5195.355	5.120	4274.805	-24.270	4.970	4853.033	3.310	-10.970
111.	5195.553	5.350	4241.167	-24.430	5.030	4851.100	2.170	-11.840
112.	5196.393	5.551	4207.592	-24.530	5.030	4848.483	1.040	-12.590
113.	5197.512	5.720	4174.176	-24.570	5.000	4846.199	-0.070	-13.520
114.	5198.941	5.850	4141.015	-24.550	4.910	4843.275	-1.170	-14.320
115.	5199.512	5.940	4108.296	-24.450	4.790	4840.743	-2.240	-15.100
116.	5199.456	6.000	4075.844	-24.290	4.610	4837.633	-3.240	-15.840
117.	5198.403	6.024	4044.025	-24.060	4.390	4834.985	-4.310	-16.550
118.	5195.382	6.010	4012.442	-23.760	4.130	4831.943	-5.300	-17.230
119.	5192.126	5.960	3982.190	-23.380	3.820	4828.523	-6.270	-17.940
120.	5188.166	5.890	3952.761	-22.930	3.470	4824.731	-7.210	-18.600
121.	5183.836	5.770	3924.046	-22.400	3.070	4820.585	-8.120	-19.270
122.	5179.272	5.630	3896.335	-21.790	2.630	4816.163	-9.000	-19.860
123.	5174.412	5.460	3869.717	-21.090	2.140	4811.503	-9.850	-20.380
124.	5169.195	5.260	3844.277	-20.300	1.610	4806.624	-10.640	-20.820
125.	5163.565	5.040	3820.098	-19.430	1.040	4801.524	-11.440	-21.170
126.	5157.467	4.790	3797.263	-18.470	0.430	4796.194	-12.250	-21.500
127.	5150.850	4.510	3775.844	-17.420	-0.210	4790.634	-12.990	-21.800
128.	5143.663	4.210	3755.927	-16.280	-0.900	4784.853	-13.700	-22.260
129.	5136.061	3.890	3737.571	-15.060	-1.520	4778.847	-14.390	-22.580
130.	5128.040	3.550	3720.846	-13.750	-2.130	4772.583	-15.050	-22.910
131.	5119.600	3.200	3705.812	-12.360	-2.720	4766.065	-15.690	-23.190
132.	5110.841	2.820	3692.524	-10.890	-3.300	4759.317	-16.290	-23.450
133.	5101.764	2.430	3681.033	-9.350	-3.880	4752.341	-16.850	-23.690
134.	5092.369	2.020	3671.341	-7.750	-4.450	4745.139	-17.370	-23.900
135.	5082.664	1.590	3663.605	-6.100	-5.020	4737.707	-17.840	-24.170
136.	5072.666	1.170	3657.733	-4.400	-5.580	4730.053	-18.260	-24.400
137.	5062.386	0.720	3653.745	-2.660	-6.130	4722.142	-18.630	-24.620
138.	5051.816	0.270	3651.773	-0.940	-6.670	4714.027	-18.950	-24.840
139.	5040.963	-0.200	3651.699	0.800	-7.200	4705.682	-19.220	-25.050
140.	5029.833	-0.640	3653.553	2.530	-7.720	4697.127	-19.440	-25.240
141.	5018.425	-1.160	3657.315	4.220	-8.230	4688.361	-19.610	-25.400
142.	5006.766	-1.650	3662.949	5.850	-8.720	4679.284	-19.730	-25.540
143.	5002.280	-2.150	3670.400	7.420	-9.190	4669.907	-19.800	-25.660
144.	5007.314	-2.660	3679.609	8.940	-9.640	4660.230	-19.820	-25.760
145.	5011.900	-3.170	3690.455	10.250	-10.150	4650.253	-19.790	-25.840
146.	5016.046	-3.690	3702.842	11.440	-10.650	4640.041	-19.710	-25.900
147.	5019.747	-4.210	3716.563	12.450	-11.100	4629.584	-19.580	-25.940
148.	5022.997	-4.730	3731.784	13.190	-11.590	4618.887	-19.400	-25.960
149.	5026.791	-5.260	3748.462	13.590	-12.070	4607.943	-19.170	-25.960
150.	5030.127	-5.790	3766.610	13.500	-12.530	4596.753	-18.890	-25.930
151.	5033.006	-6.320	3786.221	12.720	-12.970	4585.323	-18.560	-25.870
152.	5035.426	-6.850	3807.277	10.940	-13.400	4573.653	-18.180	-25.780
153.	5037.397	-7.390	3829.249	7.840	-13.820	4561.743	-17.750	-25.640
154.	5038.907	-7.920	3852.692	3.270	-14.230	4549.593	-17.270	-25.460
155.	5039.977	-8.450	3876.906	-2.310	-14.630	4537.203	-16.740	-25.240
156.	5040.677	-8.980	3901.506	-7.870	-15.020	4524.573	-16.160	-24.980
157.	5041.010	-9.510	3926.926	-12.870	-15.400	4511.703	-15.530	-24.680

V-PLANE (XZ-PLANE) OUTPUT

	LNGVEL	LPH12	LPH13	FSRWFL	FSPH12	FSPH13	SSRWFL	SSPH12	SSPH13
150.	5498.515	-9.510	15.250	3792.519	-12.450	-29.210	4094.787	13.959	-14.550
151.	5479.084	-10.869	16.330	3775.749	-15.779	-29.010	4115.443	17.990	-14.780
152.	5459.490	-13.069	16.490	3755.775	-18.079	-28.590	4141.002	29.890	-15.190
153.	5436.989	-11.078	16.450	3733.652	-19.690	-28.080	4170.283	22.950	-15.550
154.	5416.517	-11.580	16.510	3709.830	-20.420	-27.500	4202.434	24.650	-16.110
155.	5391.097	-12.090	16.550	3685.414	-20.980	-26.990	4236.877	25.560	-16.520
156.	5365.752	-12.589	16.630	3660.576	-21.270	-26.260	4273.047	26.380	-16.880
157.	5341.508	-13.069	16.630	3635.758	-21.369	-25.500	4310.779	26.990	-17.180
158.	5315.395	-13.560	16.650	3611.064	-21.790	-24.820	4349.513	27.849	-17.630
159.	5289.448	-13.992	16.630	3586.690	-21.109	-24.210	4389.586	27.750	-17.530
160.	5268.705	-14.430	16.640	3562.745	-20.410	-23.479	4430.205	27.960	-17.749
161.	5232.211	-14.860	16.640	3539.471	-20.410	-22.590	4471.552	28.070	-17.890
162.	5203.017	-15.250	16.650	3516.466	-19.930	-21.940	4513.305	28.090	-17.950
163.	5173.182	-15.630	16.610	3494.908	-19.369	-21.020	4555.584	28.820	-17.960
164.	5142.775	-15.960	16.550	3474.006	-18.710	-20.120	4597.987	27.880	-17.930
165.	5111.477	-16.260	16.450	3453.443	-17.890	-19.180	4640.443	27.650	-17.849
166.	5080.591	-16.510	16.310	3434.873	-17.200	-18.190	4682.801	27.340	-17.780
167.	5049.003	-16.700	16.150	3416.857	-16.770	-17.150	4724.895	26.940	-17.510
168.	5017.277	-16.820	15.940	3399.950	-16.390	-16.070	4766.539	26.430	-17.250
169.	5985.569	-16.850	15.650	3384.203	-14.390	-14.930	4807.523	25.810	-16.980
170.	5954.082	-15.760	15.230	3369.664	-13.420	-13.750	4847.504	25.050	-16.860
171.	5923.066	-15.530	14.810	3356.176	-12.480	-12.530	4886.502	24.130	-15.910
172.	5892.831	-15.120	14.210	3344.779	-10.990	-11.250	4923.871	23.900	-15.210
173.	5863.762	-15.490	13.630	3333.709	-9.757	-9.950	4959.207	21.520	-14.330
174.	5836.337	-14.500	12.630	3324.395	-8.660	-8.500	4992.281	19.920	-13.230
175.	5811.139	-13.243	11.170	3316.657	-7.120	-7.220	5022.217	17.820	-11.450
176.	5789.350	-11.507	9.590	3309.944	-5.739	-5.750	5044.397	15.269	-10.150
177.	5770.282	-9.280	7.667	3304.859	-4.330	-4.330	5070.023	12.150	-8.199
178.	5755.222	-6.550	5.370	3301.211	-2.900	-2.900	5086.264	8.519	-6.550
179.	5747.425	-3.400	2.770	3299.014	-1.450	-1.450	5096.374	4.409	-2.479
180.	5744.429	3.000	-0.030	3298.786	0.000	0.000	5099.416	-0.001	0.000

Z-PLANE (XY-PLANE) QUARTZ

BULK

	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
0.	5744.429	0.000	0.000	5099.014	0.000	0.000	3290.206	0.000	0.000
1.	5745.584	1.310	-2.793	5097.020	-2.560	2.930	3299.356	2.130	1.470
2.	5749.001	2.570	-5.480	5091.091	-5.050	5.770	3302.559	4.230	2.930
3.	5754.536	3.720	-7.590	5082.171	-7.420	6.420	3307.084	6.310	4.370
4.	5761.903	4.730	-10.270	5068.080	-9.620	10.040	3315.309	8.320	6.750
5.	5771.075	5.570	-12.300	5052.289	-11.630	12.990	3324.804	10.280	9.100
6.	5781.532	6.240	-14.060	5032.696	-13.440	14.670	3336.334	12.150	11.030
7.	5793.066	6.760	-15.580	5010.404	-15.070	16.500	3349.051	13.520	12.880
8.	5805.406	7.120	-16.970	4985.705	-16.520	17.500	3365.303	15.600	14.030
9.	5818.303	7.350	-17.560	4958.673	-17.810	19.100	3382.629	17.170	15.000
10.	5831.534	7.460	-18.090	4930.161	-18.370	20.120	3401.762	18.630	15.920
11.	5844.903	7.470	-19.060	4899.757	-20.000	21.000	3422.625	19.570	16.500
12.	5856.240	7.400	-20.320	4867.990	-20.910	21.140	3445.136	19.570	16.500
13.	5867.400	7.250	-20.070	4834.930	-21.730	22.360	3469.204	22.290	17.480
14.	5884.260	7.030	-21.340	4800.792	-22.450	22.930	3494.731	23.260	17.300
15.	5896.712	6.770	-21.740	4765.744	-23.060	23.410	3521.609	24.120	16.210
16.	5906.668	6.460	-22.070	4729.947	-23.630	23.610	3549.720	24.840	15.000
17.	5920.069	6.120	-22.360	4693.562	-24.050	24.160	3576.932	25.440	13.700
18.	5930.791	5.740	-22.600	4656.755	-24.450	24.460	3609.101	25.900	12.350
19.	5940.838	5.340	-22.810	4619.706	-24.710	24.720	3640.056	26.220	20.940
20.	5950.142	4.910	-22.980	4582.614	-24.850	24.940	3671.610	26.370	21.440
21.	5958.664	4.460	-23.130	4545.713	-24.830	25.130	3703.222	26.340	21.310
22.	5966.369	4.000	-23.260	4509.285	-24.620	25.290	3735.507	26.080	22.490
23.	5973.229	3.530	-23.360	4473.702	-24.160	25.420	3767.200	25.530	22.700
24.	5979.216	3.040	-23.450	4439.425	-23.340	25.530	3796.121	24.590	23.110
25.	5984.316	2.550	-23.520	4407.093	-22.010	25.620	3827.626	23.130	23.330
26.	5988.511	2.050	-23.570	4377.571	-19.970	25.680	3854.020	20.420	23.610
27.	5991.786	1.540	-23.610	4352.020	-16.910	25.740	3876.618	17.670	23.700
28.	5994.132	1.030	-23.640	4331.917	-12.550	25.770	3897.453	13.090	23.910
29.	5995.542	.520	-23.660	4316.905	-6.770	25.800	3909.706	7.050	23.900
30.	5996.013	0.000	-23.670	4314.379	0.000	25.810	3913.778	.000	24.000
31.	5995.542	-.520	-23.660	4318.905	6.770	25.800	3909.706	-7.050	23.980
32.	5994.132	-1.030	-23.640	4331.917	12.550	25.770	3897.453	-13.090	23.910
33.	5991.786	-1.540	-23.610	4352.020	16.910	25.740	3876.618	-17.670	23.700
34.	5988.511	-2.050	-23.570	4377.571	19.970	25.680	3854.020	-20.420	23.610
35.	5984.316	-2.550	-23.520	4407.093	22.010	25.620	3827.626	-23.130	23.330
36.	5979.216	-3.040	-23.450	4439.425	23.340	25.530	3796.121	-24.590	23.110
37.	5973.229	-3.530	-23.360	4473.702	24.160	25.420	3767.200	-25.530	22.700
38.	5966.369	-4.000	-23.260	4509.289	24.620	25.290	3735.507	-26.080	22.490
39.	5958.664	-4.460	-23.130	4545.713	24.830	25.130	3703.222	-26.340	21.970
40.	5950.142	-4.910	-22.980	4582.614	24.850	24.940	3671.610	-26.370	21.440
41.	5940.838	-5.340	-22.810	4619.706	24.710	24.720	3640.056	-26.220	20.940
42.	5930.791	-5.740	-22.600	4656.755	24.450	24.460	3609.101	-25.900	20.350
43.	5920.069	-6.120	-22.360	4693.562	24.050	24.160	3576.932	-25.440	19.700
44.	5906.668	-6.460	-22.070	4729.947	23.630	23.610	3549.720	-24.840	18.980
45.	5896.712	-6.770	-21.740	4765.744	23.060	23.410	3521.609	-24.120	16.210
46.	5884.260	-7.030	-21.340	4800.792	22.450	22.930	3494.731	-23.260	17.300
47.	5871.400	-7.250	-20.870	4834.930	21.730	22.360	3469.204	-22.290	16.400
48.	5856.240	-7.400	-20.320	4867.990	20.910	21.740	3445.136	-21.190	15.520
49.	5844.903	-7.470	-19.060	4899.797	20.000	21.000	3422.625	-19.570	14.500

Z-PLANE (XY-PLANE) QUARTZ

	LMVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
50.	5831.534	-7.460	-10.890	4930.161	10.970	20.120	3491.762	-16.630	13.420
51.	5818.303	-7.350	-17.360	4958.873	17.610	19.100	3302.629	-17.170	12.200
52.	5805.406	-7.120	-16.070	4985.705	16.520	17.900	3365.303	-15.600	11.000
53.	5793.066	-6.760	-15.560	5010.404	15.070	16.500	3349.951	-13.920	9.830
54.	5781.532	-6.240	-14.060	5032.696	13.440	16.870	3336.334	-12.150	8.520
55.	5771.075	-5.570	-12.300	5052.209	11.630	12.550	3324.804	-10.320	7.100
56.	5761.983	-4.730	-10.270	5068.860	9.620	10.640	3315.399	-8.320	5.670
57.	5754.536	-3.720	-7.990	5082.171	7.420	8.420	3307.884	-6.310	4.370
58.	5749.001	-2.570	-5.480	5091.891	5.050	5.770	3302.959	-4.230	2.930
59.	5745.584	-1.310	-2.790	5097.820	2.560	2.930	3299.356	-2.130	1.470
60.	5744.429	0.000	0.000	5099.814	-0.000	-0.000	3296.286	0.000	-0.000
61.	5745.584	1.310	2.750	5097.820	-2.560	-2.530	3299.356	2.130	-1.470
62.	5749.001	2.570	5.480	5091.891	-5.050	-5.770	3302.959	4.230	-2.930
63.	5754.536	3.720	7.990	5082.171	-7.420	-8.420	3307.884	6.310	-4.370
64.	5761.983	4.730	10.270	5068.860	-9.620	-10.640	3315.399	8.320	-5.670
65.	5771.075	5.570	12.300	5052.209	-11.630	-12.550	3324.804	10.320	-6.770
66.	5781.532	6.240	14.060	5032.696	-13.440	-14.870	3336.334	12.150	-7.820
67.	5793.066	6.760	15.560	5010.404	-15.070	-16.500	3349.951	13.920	-8.930
68.	5805.406	7.120	16.870	4985.705	-16.520	-17.900	3365.303	15.600	-10.000
69.	5818.303	7.350	17.360	4958.873	-17.610	-19.100	3382.629	17.170	-11.200
70.	5831.534	7.460	18.890	4930.161	-18.970	-20.120	3491.762	18.630	-12.420
71.	5844.903	7.470	19.660	4899.797	-20.000	-21.000	3422.625	19.570	-13.420
72.	5858.240	7.400	20.320	4867.930	-20.910	-21.740	3452.136	21.150	-14.500
73.	5871.400	7.250	20.070	4834.990	-21.730	-22.320	3499.204	22.290	-15.770
74.	5884.260	7.030	21.340	4800.792	-22.450	-22.830	3499.204	23.260	-16.970
75.	5896.712	6.770	21.740	4768.744	-23.080	-23.410	3521.809	24.120	-17.300
76.	5908.666	6.460	22.070	4729.947	-23.630	-23.810	3549.720	24.840	-17.700
77.	5920.049	6.120	22.360	4693.562	-24.090	-24.160	3576.932	25.440	-18.000
78.	5930.791	5.740	22.600	4656.755	-24.450	-24.460	3609.101	25.900	-18.100
79.	5940.838	5.340	22.810	4619.706	-24.710	-24.720	3641.610	26.220	-18.000
80.	5950.142	4.910	22.980	4582.614	-24.860	-24.940	3671.610	26.370	-17.700
81.	5958.664	4.460	23.130	4545.713	-24.830	-25.130	3703.522	26.340	-17.300
82.	5966.369	4.000	23.260	4509.289	-24.620	-25.290	3735.507	26.060	-16.900
83.	5973.229	3.530	23.360	4473.702	-24.160	-25.420	3767.421	25.530	-16.400
84.	5979.218	3.040	23.450	4439.425	-23.340	-25.530	3798.121	24.590	-15.800
85.	5984.316	2.550	23.520	4407.093	-22.010	-25.620	3827.620	23.130	-15.100
86.	5988.511	2.050	23.578	4377.571	-19.970	-25.640	3854.950	20.920	-14.300
87.	5991.766	1.540	23.610	4352.020	-18.910	-25.740	3876.610	17.670	-13.400
88.	5994.132	1.030	23.640	4331.917	-17.550	-25.770	3897.453	13.890	-12.400
89.	5995.542	.520	23.660	4318.905	-6.770	-25.600	3919.706	7.050	-11.300
90.	5996.013	-0.000	23.670	4316.379	0.000	-25.610	3933.978	-0.000	-10.000
91.	5995.542	-0.520	23.660	4318.905	6.770	-25.600	3949.706	-7.050	-8.700
92.	5994.132	-1.030	23.640	4331.917	12.550	-25.770	3967.453	-13.890	-7.300
93.	5991.766	-1.540	23.610	4352.020	18.910	-25.740	3976.610	-17.670	-5.800
94.	5988.511	-2.050	23.578	4377.571	19.970	-25.640	3984.950	-20.920	-4.300
95.	5984.316	-2.550	23.520	4407.093	22.010	-25.620	3997.620	-23.130	-2.800
96.	5979.218	-3.040	23.450	4439.425	23.340	-25.530	3998.121	-24.590	-1.300
97.	5973.229	-3.530	23.360	4473.702	24.160	-25.420	3967.421	-25.530	0.000
98.	5966.369	-4.000	23.260	4509.289	24.620	-25.290	3735.507	-26.060	1.300
99.	5958.664	-4.460	23.130	4545.713	24.830	-25.130	3703.522	-26.340	2.700

Z-PLANE (XY-PLANE) QUARTZ

	LPMI12	LPMI13	FSRVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13
100.	5950.142	22.980	4582.614	24.650	-24.940	3671.610	-26.370	-21.400
101.	5940.838	22.410	4619.706	24.710	-24.720	3640.038	-26.220	-20.900
102.	5930.791	22.600	4656.755	24.450	-24.460	3605.101	-25.900	-20.350
103.	5920.049	22.360	4693.562	24.050	-24.160	3570.932	-25.440	-19.700
104.	5908.666	22.070	4729.947	23.630	-23.610	3541.720	-24.800	-18.900
105.	5896.712	21.740	4765.744	23.000	-23.410	3521.609	-24.120	-18.210
106.	5884.260	21.340	4800.792	22.450	-22.930	3494.731	-23.260	-17.300
107.	5871.400	20.870	4834.930	21.730	-22.310	3469.204	-22.290	-16.400
108.	5858.240	20.320	4867.990	20.510	-21.740	3445.130	-21.190	-15.500
109.	5844.903	19.660	4899.797	20.000	-21.000	3422.625	-19.900	-14.500
110.	5831.534	18.890	4930.161	18.970	-20.120	3401.762	-18.630	-13.400
111.	5818.103	17.960	4958.673	17.610	-19.100	3382.629	-17.170	-12.200
112.	5805.406	16.870	4985.705	16.520	-17.500	3365.303	-15.600	-11.000
113.	5793.066	15.580	5010.404	15.070	-16.500	3349.051	-13.920	-9.800
114.	5781.532	14.060	5032.696	13.440	-14.470	3336.334	-12.150	-8.200
115.	5771.075	12.300	5052.289	11.630	-12.950	3324.804	-10.280	-7.100
116.	5761.983	10.270	5068.660	9.620	-10.640	3315.309	-8.310	-5.700
117.	5754.538	7.590	5082.171	7.420	-8.420	3317.664	-6.310	-4.300
118.	5749.001	5.480	5091.691	5.050	-5.770	3322.559	-4.230	-2.900
119.	5745.584	2.790	5097.820	2.560	-2.930	3298.206	0.000	0.000
120.	5744.425	-0.000	5099.614	-0.000	0.000	3298.356	2.130	1.400
121.	5745.584	1.310	5097.820	-2.560	5.770	3302.559	4.230	2.900
122.	5745.001	2.570	5091.691	-5.050	8.420	3315.309	6.310	4.300
123.	5754.538	5.480	5082.171	-7.420	10.640	3324.804	10.280	7.100
124.	5761.983	10.270	5068.660	-9.620	12.550	3336.334	12.150	9.800
125.	5771.075	12.300	5052.289	-11.630	14.470	3349.051	13.920	11.000
126.	5781.532	14.060	5032.696	-13.440	16.500	3365.303	15.600	12.200
127.	5793.066	15.580	5010.404	-15.070	17.500	3382.629	17.170	13.400
128.	5805.406	16.870	4985.705	-16.520	18.970	3401.762	18.630	14.500
129.	5818.103	17.960	4958.673	-17.610	19.100	3422.625	19.900	15.500
130.	5831.534	18.890	4930.161	-18.970	20.120	3445.130	21.190	16.400
131.	5844.903	19.660	4899.797	-20.000	21.000	3469.204	22.290	17.300
132.	5858.240	20.320	4867.990	-20.910	21.740	3494.731	23.260	18.210
133.	5871.400	20.870	4834.930	-21.730	22.310	3521.609	24.120	19.100
134.	5884.260	21.340	4800.792	-22.450	22.530	3541.720	24.800	20.000
135.	5896.712	21.740	4765.744	-23.000	23.410	3570.932	25.440	20.900
136.	5908.666	22.070	4729.947	-23.630	23.610	3605.101	25.900	21.800
137.	5920.049	22.360	4693.562	-24.050	24.160	3640.038	26.220	22.700
138.	5930.791	22.600	4656.755	-24.450	24.460	3671.610	26.370	23.600
139.	5940.838	22.410	4619.706	-24.710	24.720	3705.507	26.500	24.500
140.	5950.142	22.980	4582.614	-24.940	25.130	3735.507	26.800	25.400
141.	5958.666	23.130	4556.713	-24.830	25.420	3767.200	27.000	26.300
142.	5968.369	23.260	4529.289	-24.620	25.250	3801.121	27.100	27.200
143.	5973.229	23.360	4499.702	-24.160	25.530	3836.628	27.100	28.100
144.	5979.218	23.450	4469.425	-23.340	25.620	3873.618	27.000	29.000
145.	5986.310	23.520	4437.571	-22.010	25.660	3912.618	26.800	29.900
146.	5994.511	23.570	4399.970	-19.970	25.660	3954.050	26.500	30.800
147.	5991.786	23.610	4352.020	-16.910	25.740	3998.453	26.100	31.700
148.	5996.132	23.640	4311.917	-12.550	25.770	4045.700	25.600	32.600
149.	5998.542	23.660	4268.905	-6.770	25.800			

Z-PLANE (XY-PLANE) QUARTZ

BULK

	LMSVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
150.	5996.013	-0.000	-23.670	4314.379	0.000	25.610	3913.976	-0.000	24.000
151.	5995.542	-0.520	-23.660	4310.905	6.770	25.600	3909.706	-7.050	23.900
152.	5994.132	-1.030	-23.640	4331.917	12.550	25.770	3697.453	-13.490	23.910
153.	5991.786	-1.540	-23.610	4352.020	18.910	25.740	3670.616	-17.270	23.610
154.	5988.511	-2.050	-23.570	4377.571	25.680	25.680	3654.850	-20.920	23.610
155.	5984.318	-2.550	-23.520	4407.093	22.010	25.620	3627.620	-23.130	23.390
156.	5979.216	-3.040	-23.450	4439.425	22.010	25.530	3796.121	-24.590	23.110
157.	5973.229	-3.530	-23.360	4473.702	24.160	25.420	3767.200	-25.530	22.600
158.	5966.365	-4.000	-23.260	4509.269	24.620	25.290	3735.537	-26.080	22.400
159.	5958.664	-4.460	-23.130	4545.713	24.630	25.130	3703.522	-26.340	21.910
160.	5950.142	-4.910	-22.980	4582.614	24.650	24.640	3671.610	-26.370	21.440
161.	5940.836	-5.340	-22.810	4619.706	24.710	24.720	3644.050	-26.220	20.990
162.	5930.791	-5.740	-22.600	4656.755	24.450	24.460	3609.101	-25.500	20.350
163.	5920.049	-6.120	-22.360	4693.562	24.090	24.160	3576.932	-25.440	19.700
164.	5908.666	-6.480	-22.070	4729.947	23.630	23.610	3549.720	-24.640	18.900
165.	5896.712	-6.770	-21.740	4765.744	23.080	23.410	3521.619	-24.120	18.210
166.	5884.260	-7.030	-21.340	4800.792	22.450	22.530	3494.731	-23.260	17.340
167.	5871.400	-7.250	-20.870	4834.930	21.730	22.380	3469.204	-22.290	16.480
168.	5858.240	-7.400	-20.320	4867.990	20.910	21.740	3445.136	-21.190	15.920
169.	5844.903	-7.470	-19.660	4899.797	20.000	21.000	3422.625	-19.570	15.500
170.	5831.534	-7.480	-18.990	4930.161	18.970	20.120	3401.762	-18.630	15.420
171.	5818.303	-7.350	-17.960	4958.673	17.610	19.100	3382.629	-17.170	15.280
172.	5805.406	-7.120	-16.870	4985.705	16.520	17.900	3365.303	-15.680	15.000
173.	5793.066	-6.760	-15.580	5010.404	15.070	16.500	3349.051	-13.520	14.630
174.	5781.532	-6.240	-14.060	5032.696	13.440	14.070	3336.334	-12.150	14.110
175.	5771.075	-5.570	-12.300	5052.289	11.630	12.550	3324.004	-10.260	13.590
176.	5761.903	-4.730	-10.270	5068.680	9.620	10.840	3315.309	-8.320	12.970
177.	5754.538	-3.720	-7.990	5082.171	7.420	8.420	3307.084	-6.310	12.350
178.	5748.001	-2.570	-5.480	5091.691	5.000	5.770	3302.559	-4.230	11.740
179.	5743.584	-1.310	-2.790	5097.820	2.500	2.930	3294.356	-2.130	11.140
180.	5744.429	0.000	0.000	5099.814	-0.000	-0.000	3296.286	0.000	-0.000

X-PLANE (VZ-PLANE) RUTILE

	LNQVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	7863.497	-0.000	-0.000	6645.215	0.000	0.000	5302.561	-0.000	-0.000
1.	7865.005	1.250	-0.000	6644.867	-0.340	0.000	5381.702	-1.450	0.000
2.	7869.515	2.500	-0.000	6643.823	-0.690	0.000	5374.130	-2.000	0.000
3.	7896.997	3.720	-0.000	6642.084	-1.030	0.000	5374.894	-3.090	0.000
4.	7907.396	4.900	-0.000	6639.652	-1.370	0.000	5369.029	-4.060	0.000
5.	7920.649	6.050	-0.000	6636.529	-1.710	0.000	5361.611	-4.990	0.000
6.	7936.661	7.140	-0.000	6632.718	-2.060	0.000	5352.728	-5.800	0.000
7.	7955.332	8.100	-0.000	6628.222	-2.390	0.000	5342.480	-6.660	0.000
8.	7976.548	9.160	-0.000	6623.045	-2.730	0.000	5330.982	-7.400	0.000
9.	8000.107	10.070	-0.000	6617.152	-3.070	0.000	5316.357	-8.060	0.000
10.	8026.116	10.920	-0.000	6610.668	-3.400	0.000	5304.733	-8.650	0.000
11.	8054.200	11.700	-0.000	6603.480	-3.730	0.000	5295.031	-9.150	0.000
12.	8084.300	12.420	-0.000	6595.634	-4.060	0.000	5275.024	-9.560	0.000
13.	8116.276	13.060	-0.000	6587.137	-4.390	0.000	5254.224	-9.890	0.000
14.	8149.995	13.650	-0.000	6577.997	-4.710	0.000	5242.962	-10.190	0.000
15.	8185.314	14.170	-0.000	6568.223	-5.030	0.000	5226.374	-10.360	0.000
16.	8222.101	14.640	-0.000	6557.823	-5.350	0.000	5209.591	-10.490	0.000
17.	8260.227	15.050	-0.000	6546.807	-5.660	0.000	5192.733	-10.530	0.000
18.	8299.567	15.400	-0.000	6535.166	-5.970	0.000	5175.720	-10.510	0.000
19.	8340.000	15.710	-0.000	6522.971	-6.270	0.000	5154.261	-10.410	0.000
20.	8381.412	15.970	-0.000	6510.173	-6.570	0.000	5142.800	-10.250	0.000
21.	8423.691	16.190	-0.000	6496.804	-6.860	0.000	5126.016	-10.040	0.000
22.	8466.733	16.360	-0.000	6482.877	-7.150	0.000	5111.219	-9.760	0.000
23.	8510.439	16.500	-0.000	6468.406	-7.440	0.000	5096.152	-9.430	0.000
24.	8554.713	16.610	-0.000	6453.405	-7.720	0.000	5081.691	-9.050	0.000
25.	8599.467	16.680	-0.000	6437.888	-7.990	0.000	5067.905	-8.630	0.000
26.	8644.616	16.720	-0.000	6421.870	-8.260	0.000	5054.057	-8.170	0.000
27.	8690.079	16.730	-0.000	6405.368	-8.520	0.000	5042.602	-7.660	0.000
28.	8735.780	16.720	-0.000	6388.396	-8.770	0.000	5031.106	-7.130	0.000
29.	8781.646	16.680	-0.000	6370.976	-9.020	0.000	5020.059	-6.560	0.000
30.	8827.614	16.620	-0.000	6353.121	-9.250	0.000	5011.050	-5.970	0.000
31.	8873.614	16.540	-0.000	6334.851	-9.460	0.000	5002.391	-5.350	0.000
32.	8919.567	16.440	-0.000	6316.183	-9.710	0.000	4994.705	-4.720	0.000
33.	8965.476	16.320	-0.000	6297.139	-9.920	0.000	4988.012	-4.070	0.000
34.	9011.225	16.190	-0.000	6277.737	-10.130	0.000	4982.324	-3.410	0.000
35.	9056.785	16.040	-0.000	6257.996	-10.330	0.000	4977.647	-2.750	0.000
36.	9102.105	15.880	-0.000	6237.943	-10.510	0.000	4973.966	-2.060	0.000
37.	9147.139	15.710	-0.000	6217.593	-10.690	0.000	4971.337	-1.420	0.000
38.	9191.844	15.510	-0.000	6196.971	-10.860	0.000	4969.693	-0.760	0.000
39.	9236.176	15.310	-0.000	6176.096	-11.020	0.000	4968.042	-0.000	0.000
40.	9280.102	15.100	-0.000	6154.999	-11.170	0.000	4968.370	0.540	0.000
41.	9323.577	14.860	-0.000	6133.696	-11.300	0.000	4970.657	1.160	0.000
42.	9366.570	14.650	-0.000	6112.213	-11.430	0.000	4972.880	1.770	0.000
43.	9409.046	14.410	-0.000	6090.576	-11.540	0.000	4976.012	2.360	0.000
44.	9450.974	14.170	-0.000	6068.808	-11.640	0.000	4980.025	2.930	0.000
45.	9492.323	13.920	-0.000	6046.935	-11.730	0.000	4984.084	3.470	0.000
46.	9533.065	13.660	-0.000	6024.982	-11.810	0.000	4990.556	3.980	0.000
47.	9573.174	13.390	-0.000	6002.977	-11.870	0.000	4997.083	4.470	0.000
48.	9612.622	13.120	-0.000	5980.944	-11.920	0.000	5004.185	4.930	0.000
49.	9651.386	12.850	-0.000	5958.911	-11.966	0.000	5012.061	5.360	0.000

BULK

X-PLANE (YZ-PLANE) RUTILE

	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
50.	9689.443	12.570	-0.000	5936.904	-11.980	0.000	5020.588	5.760	-0.000
51.	9726.772	12.280	-0.000	5914.952	-11.990	0.000	5029.720	6.120	-0.000
52.	9763.351	11.990	-0.000	5893.040	-11.980	0.000	5034.412	6.460	-0.000
53.	9799.162	11.700	-0.000	5871.316	-11.960	0.000	5043.617	6.760	-0.000
54.	9834.185	11.400	-0.000	5849.693	-11.920	0.000	5050.287	7.030	-0.000
55.	9868.404	11.110	-0.000	5828.233	-11.860	0.000	5071.373	7.260	-0.000
56.	9901.802	10.800	-0.000	5806.967	-11.790	0.000	5082.827	7.460	-0.000
57.	9934.364	10.500	-0.000	5785.921	-11.710	0.000	5094.600	7.630	-0.000
58.	9966.875	10.150	-0.000	5765.125	-11.600	0.000	5106.642	7.770	-0.000
59.	9996.921	9.800	-0.000	5744.607	-11.480	0.000	5118.904	7.870	-0.000
60.	10026.890	9.500	-0.000	5724.394	-11.350	0.000	5131.338	7.950	-0.000
61.	10055.370	9.270	-0.000	5704.316	-11.190	0.000	5143.895	8.000	-0.000
62.	10084.145	9.050	-0.000	5684.995	-11.020	0.000	5156.526	8.000	-0.000
63.	10113.417	8.840	-0.000	5665.871	-10.830	0.000	5169.106	7.950	-0.000
64.	10137.764	8.620	-0.000	5647.160	-10.630	0.000	5181.826	7.940	-0.000
65.	10163.180	8.410	-0.000	5628.693	-10.400	0.000	5194.403	7.870	-0.000
66.	10187.657	8.200	-0.000	5611.097	-10.160	0.000	5206.870	7.770	-0.000
67.	10213.166	7.970	-0.000	5593.797	-9.900	0.000	5219.185	7.640	-0.000
68.	10233.761	7.750	-0.000	5577.019	-9.630	0.000	5231.305	7.490	-0.000
69.	10255.374	7.530	-0.000	5560.790	-9.330	0.000	5243.109	7.320	-0.000
70.	10276.815	7.310	-0.000	5545.132	-9.020	0.000	5254.796	7.120	-0.000
71.	10295.690	7.090	-0.000	5530.072	-8.690	0.000	5266.093	6.900	-0.000
72.	10314.381	6.870	-0.000	5515.631	-8.350	0.000	5277.030	6.660	-0.000
73.	10332.087	6.650	-0.000	5501.832	-7.990	0.000	5287.598	6.400	-0.000
74.	10348.804	6.430	-0.000	5488.696	-7.610	0.000	5297.730	6.120	-0.000
75.	10364.526	6.210	-0.000	5476.248	-7.220	0.000	5307.427	5.830	-0.000
76.	10379.252	5.990	-0.000	5464.503	-6.810	0.000	5316.636	5.510	-0.000
77.	10392.975	5.770	-0.000	5453.482	-6.390	0.000	5325.335	5.190	-0.000
78.	10405.695	5.550	-0.000	5443.202	-5.950	0.000	5333.496	4.840	-0.000
79.	10417.406	5.330	-0.000	5433.581	-5.500	0.000	5341.100	4.490	-0.000
80.	10428.106	5.110	-0.000	5424.934	-5.040	0.000	5348.119	4.120	-0.000
81.	10437.797	4.890	-0.000	5416.975	-4.570	0.000	5354.533	3.740	-0.000
82.	10446.472	4.670	-0.000	5409.817	-4.090	0.000	5360.323	3.350	-0.000
83.	10454.130	4.450	-0.000	5403.473	-3.600	0.000	5365.473	2.950	-0.000
84.	10460.771	4.230	-0.000	5397.953	-3.100	0.000	5369.967	2.540	-0.000
85.	10466.391	4.010	-0.000	5393.267	-2.600	0.000	5373.792	2.130	-0.000
86.	10470.992	3.790	-0.000	5389.421	-2.080	0.000	5376.937	1.710	-0.000
87.	10474.571	3.570	-0.000	5386.424	-1.570	0.000	5379.392	1.290	-0.000
88.	10477.126	3.350	-0.000	5384.275	-1.050	0.000	5381.151	.860	-0.000
89.	10478.662	3.130	-0.000	5382.991	-.520	0.000	5382.200	.430	-0.000
90.	10479.174	2.910	-0.000	5382.561	0.000	0.000	5382.561	0.000	-0.000
91.	10479.662	2.690	-0.000	5382.991	.520	0.000	5382.200	-.430	-0.000
92.	10479.128	2.470	-0.000	5384.279	1.050	0.000	5381.151	-1.60	-0.000
93.	10478.571	2.250	-0.000	5386.424	1.570	0.000	5379.392	-1.290	-0.000
94.	10478.992	2.030	-0.000	5389.421	2.080	0.000	5376.937	-1.710	-0.000
95.	10466.391	1.810	-0.000	5393.267	2.600	0.000	5373.792	-2.130	-0.000
96.	10460.771	1.590	-0.000	5397.953	3.100	0.000	5369.967	-2.540	-0.000
97.	10454.130	1.370	-0.000	5403.473	3.600	0.000	5365.473	-2.950	-0.000
98.	10446.472	1.150	-0.000	5409.817	4.090	0.000	5360.323	-3.350	-0.000
99.	10437.797	0.930	-0.000	5416.975	4.570	0.000	5354.533	-3.740	-0.000

X-PLANE (YZ-PLANE) RUTILE

	LNGL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	10428.100	-3.210	-0.000	5424.934	5.040	0.000	5340.119	-4.120	-3.000
101.	10417.406	-3.530	-0.000	5433.681	5.500	0.000	5341.100	-4.490	-3.000
102.	10405.695	-3.650	-0.000	5443.202	5.950	0.000	5333.448	-4.640	-3.000
103.	10392.975	-4.170	-0.000	5453.482	6.350	0.000	5325.335	-5.190	-3.000
104.	10379.252	-4.490	-0.000	5464.503	6.810	0.000	5316.836	-5.510	-3.000
105.	10364.526	-4.810	-0.000	5476.248	7.220	0.000	5307.427	-5.830	-3.000
106.	10348.804	-5.130	-0.000	5488.696	7.610	0.000	5297.738	-6.120	-3.000
107.	10332.087	-5.450	-0.000	5501.832	7.950	0.000	5287.596	-6.400	-3.000
108.	10314.381	-5.770	-0.000	5515.631	8.350	0.000	5277.038	-6.680	-3.000
109.	10295.690	-6.090	-0.000	5530.072	8.690	0.000	5266.093	-6.950	-3.000
110.	10276.019	-6.410	-0.000	5545.132	9.020	0.000	5254.738	-7.120	-3.000
111.	10255.374	-6.730	-0.000	5560.790	9.330	0.000	5243.165	-7.320	-3.000
112.	10233.761	-7.050	-0.000	5577.019	9.630	0.000	5231.305	-7.490	-3.000
113.	10211.186	-7.370	-0.000	5593.797	9.900	0.000	5219.165	-7.640	-3.000
114.	10187.657	-7.690	-0.000	5611.097	10.160	0.000	5206.070	-7.770	-3.000
115.	10163.180	-8.010	-0.000	5628.893	10.400	0.000	5194.403	-7.870	-3.000
116.	10137.764	-8.320	-0.000	5647.160	10.630	0.000	5181.826	-7.940	-3.000
117.	10111.417	-8.640	-0.000	5665.871	10.830	0.000	5169.106	-7.990	-3.000
118.	10084.149	-8.950	-0.000	5684.995	11.020	0.000	5156.526	-8.000	-3.000
119.	10055.970	-9.270	-0.000	5704.516	11.190	0.000	5143.895	-7.990	-3.000
120.	10026.590	-9.580	-0.000	5724.594	11.350	0.000	5131.330	-7.950	-3.000
121.	9996.921	-9.890	-0.000	5744.607	11.480	0.000	5118.904	-7.870	-3.000
122.	9966.075	-10.190	0.000	5765.125	11.600	0.000	5106.812	-7.770	-3.000
123.	9934.364	-10.500	0.000	5785.921	11.710	0.000	5094.800	-7.630	-3.000
124.	9901.802	-10.800	0.000	5806.967	11.790	0.000	5082.027	-7.460	-3.000
125.	9868.404	-11.110	0.000	5828.233	11.860	0.000	5071.373	-7.260	-3.000
126.	9834.185	-11.400	0.000	5849.693	11.920	0.000	5060.297	-7.030	-3.000
127.	9799.162	-11.700	0.000	5871.318	11.960	0.000	5049.617	-6.760	-3.000
128.	9763.351	-11.990	0.000	5893.080	11.980	0.000	5039.412	-6.460	-3.000
129.	9726.772	-12.280	0.000	5914.952	11.990	0.000	5029.720	-6.120	-3.000
130.	9689.443	-12.570	0.000	5936.904	11.980	0.000	5020.586	-5.760	-3.000
131.	9651.366	-12.850	0.000	5958.911	11.960	0.000	5012.001	-5.360	-3.000
132.	9612.622	-13.120	0.000	5980.944	11.920	0.000	5004.105	-4.930	-3.000
133.	9573.174	-13.390	0.000	6002.977	11.870	0.000	4997.033	-4.470	-3.000
134.	9533.065	-13.660	0.000	6024.982	11.810	0.000	4990.556	-3.980	-3.000
135.	9492.323	-13.920	0.000	6046.935	11.730	0.000	4984.884	-3.470	-3.000
136.	9450.974	-14.170	0.000	6068.806	11.640	0.000	4980.025	-2.930	-3.000
137.	9409.046	-14.410	0.000	6090.576	11.540	0.000	4976.012	-2.360	-3.000
138.	9366.570	-14.650	0.000	6112.213	11.430	0.000	4972.840	-1.770	-3.000
139.	9323.577	-14.880	0.000	6133.696	11.300	0.000	4970.657	-1.160	-3.000
140.	9280.102	-15.100	0.000	6154.999	11.170	0.000	4969.370	-.540	-3.000
141.	9236.176	-15.310	0.000	6176.096	11.020	0.000	4969.042	.100	-3.000
142.	9191.844	-15.510	0.000	6196.971	10.860	0.000	4968.693	.700	-3.000
143.	9147.139	-15.700	0.000	6217.593	10.690	0.000	4971.337	1.420	-3.000
144.	9102.105	-15.880	0.000	6237.943	10.510	0.000	4973.906	2.080	-3.000
145.	9056.785	-16.040	0.000	6257.996	10.330	0.000	4977.647	2.750	-3.000
146.	9011.225	-16.190	0.000	6277.737	10.130	0.000	4982.324	3.410	-3.000
147.	8965.476	-16.320	0.000	6297.139	9.920	0.000	4988.012	4.070	-3.000
148.	8919.587	-16.440	0.000	6316.183	9.710	0.000	4994.705	4.720	-3.000
149.	8873.614	-16.540	0.000	6334.851	9.460	0.000	5002.391	5.350	-3.000

BULK

X-PLANE (YZ-PLANE) RUTILE										BULK	
	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13		
150.	8827.614	-16.620	0.000	6353.121	9.250	-0.000	5011.050	5.970	-0.000		
151.	8781.646	-16.600	0.000	6370.976	9.020	-0.000	5020.659	5.560	-0.000		
152.	8735.760	-16.720	0.000	6388.398	8.770	-0.000	5031.188	7.130	-0.000		
153.	8690.079	-16.730	0.000	6405.366	8.520	-0.000	5042.602	7.660	-0.000		
154.	8644.616	-16.720	0.000	6421.370	8.260	-0.000	5054.057	8.170	-0.000		
155.	8599.467	-16.660	0.000	6437.888	7.990	-0.000	5067.909	8.630	-0.000		
156.	8554.713	-16.610	0.000	6453.405	7.720	-0.000	5081.691	9.050	-0.000		
157.	8510.439	-16.500	0.000	6468.406	7.440	-0.000	5096.152	9.430	-0.000		
158.	8466.733	-16.360	0.000	6482.877	7.150	-0.000	5111.219	9.760	-0.000		
159.	8423.691	-16.190	0.000	6496.804	6.860	-0.000	5126.016	10.640	-0.000		
160.	8381.412	-15.970	0.000	6510.173	6.570	-0.000	5142.060	10.250	-0.000		
161.	8340.000	-15.710	0.000	6522.971	6.270	-0.000	5159.261	10.410	-0.000		
162.	8299.567	-15.460	0.000	6535.166	5.970	-0.000	5175.920	10.510	-0.000		
163.	8260.227	-15.050	0.000	6546.807	5.660	-0.000	5192.733	10.530	-0.000		
164.	8222.101	-14.640	0.000	6557.823	5.350	-0.000	5209.591	10.490	-0.000		
165.	8185.314	-14.110	0.000	6568.223	5.030	-0.000	5226.374	10.380	-0.000		
166.	8149.995	-13.650	0.000	6577.997	4.710	-0.000	5242.962	10.190	-0.000		
167.	8116.276	-13.060	0.000	6587.137	4.390	-0.000	5259.224	9.920	-0.000		
168.	8084.300	-12.420	0.000	6595.634	4.060	-0.000	5275.031	9.560	-0.000		
169.	8054.200	-11.760	0.000	6603.400	3.730	-0.000	5290.246	9.150	-0.000		
170.	8026.116	-10.920	0.000	6610.668	3.400	-0.000	5304.733	8.650	-0.000		
171.	8000.167	-10.070	0.000	6617.192	3.070	-0.000	5318.357	8.060	-0.000		
172.	7976.540	-9.160	0.000	6623.045	2.730	-0.000	5330.962	7.400	-0.000		
173.	7955.332	-8.160	0.000	6628.222	2.390	-0.000	5342.480	6.660	-0.000		
174.	7936.661	-7.140	0.000	6632.718	2.060	-0.000	5352.728	5.860	-0.000		
175.	7920.649	-6.050	0.000	6636.529	1.710	-0.000	5361.611	4.990	-0.000		
176.	7907.396	-4.900	0.000	6639.652	1.370	-0.000	5369.029	4.060	-0.000		
177.	7896.997	-3.720	0.000	6642.084	1.030	-0.000	5374.094	3.090	-0.000		
178.	7889.515	-2.500	0.000	6644.823	.690	-0.000	5379.136	2.080	-0.000		
179.	7885.005	-1.250	0.000	6647.867	.340	-0.000	5381.702	1.050	-0.000		
180.	7883.497	0.000	0.000	6649.215	-0.000	-0.000	5382.561	-0.000	-0.000		

2-PLANE (XY-PLANE) PROFILE

	LNGVEL	LPHI12	LPHI13	FSPVEL	FSPH12	FSPH13	SRPVEL	SSPH12	SSPH13
0.	7887.697	0.000	0.000	6645.215	0.000	0.000	5382.561	0.000	0.000
1.	7898.779	5.990	0.000	6636.566	-8.440	0.000	5382.561	0.000	0.000
2.	7912.021	11.360	0.000	6611.278	-16.069	0.000	5382.561	0.000	0.000
3.	7945.515	15.760	0.000	6570.815	-22.390	0.000	5382.561	0.000	0.000
4.	7989.416	19.050	0.000	6517.444	-27.429	0.000	5382.561	0.000	0.000
5.	8041.199	21.430	0.000	6457.490	-31.359	0.000	5382.561	0.000	0.000
6.	8098.958	23.050	0.000	6390.853	-34.440	0.000	5382.561	0.000	0.000
7.	8161.020	24.110	0.000	6301.283	-36.499	0.000	5382.561	0.000	0.000
8.	8226.066	24.730	0.000	6216.155	-38.499	0.000	5382.561	0.000	0.000
9.	8292.999	25.049	0.000	6126.559	-40.560	0.000	5382.561	0.000	0.000
10.	8361.040	25.110	0.000	6033.359	-41.980	0.000	5382.561	0.000	0.000
11.	8429.565	24.950	0.000	5937.243	-43.229	0.000	5382.561	0.000	0.000
12.	8498.064	24.740	0.000	5838.771	-44.310	0.000	5382.561	0.000	0.000
13.	8566.159	24.390	0.000	5738.409	-45.290	0.000	5382.561	0.000	0.000
14.	8633.525	23.940	0.000	5636.547	-46.170	0.000	5382.561	0.000	0.000
15.	8699.911	23.400	0.000	5533.531	-46.940	0.000	5382.561	0.000	0.000
16.	8765.109	22.800	0.000	5429.665	-47.710	0.000	5382.561	0.000	0.000
17.	8829.447	22.270	0.000	5326.742	-48.390	0.000	5382.561	0.000	0.000
18.	8891.280	21.630	0.000	5220.493	-49.000	0.000	5382.561	0.000	0.000
19.	8951.985	20.960	0.000	5115.690	-49.550	0.000	5382.561	0.000	0.000
20.	9010.955	20.270	0.000	5011.004	-50.050	0.000	5382.561	0.000	0.000
21.	9068.099	19.550	0.000	4906.932	-50.490	0.000	5382.561	0.000	0.000
22.	9123.339	18.820	0.000	4803.467	-50.870	0.000	5382.561	0.000	0.000
23.	9175.502	18.070	0.000	4700.892	-51.190	0.000	5382.561	0.000	0.000
24.	9227.327	17.310	0.000	4599.524	-51.440	0.000	5382.561	0.000	0.000
25.	9276.959	16.540	0.000	4499.605	-51.610	0.000	5382.561	0.000	0.000
26.	9323.944	15.750	0.000	4401.410	-51.690	0.000	5382.561	0.000	0.000
27.	9368.749	14.960	0.000	4305.225	-51.680	0.000	5382.561	0.000	0.000
28.	9411.322	14.160	0.000	4211.345	-51.570	0.000	5382.561	0.000	0.000
29.	9451.631	13.360	0.000	4121.074	-51.330	0.000	5382.561	0.000	0.000
30.	9489.543	12.540	0.000	4031.751	-50.950	0.000	5382.561	0.000	0.000
31.	9525.327	11.740	0.000	3946.714	-50.410	0.000	5382.561	0.000	0.000
32.	9558.659	10.910	0.000	3865.249	-49.640	0.000	5382.561	0.000	0.000
33.	9589.611	10.080	0.000	3787.444	-48.730	0.000	5382.561	0.000	0.000
34.	9618.164	9.250	0.000	3714.745	-47.520	0.000	5382.561	0.000	0.000
35.	9644.297	8.420	0.000	3646.362	-46.000	0.000	5382.561	0.000	0.000
36.	9667.992	7.590	0.000	3583.054	-44.110	0.000	5382.561	0.000	0.000
37.	9689.233	6.750	0.000	3525.220	-41.790	0.000	5382.561	0.000	0.000
38.	9708.007	5.910	0.000	3473.184	-38.960	0.000	5382.561	0.000	0.000
39.	9724.302	5.070	0.000	3427.246	-35.520	0.000	5382.561	0.000	0.000
40.	9738.107	4.230	0.000	3387.072	-31.400	0.000	5382.561	0.000	0.000
41.	9749.414	3.380	0.000	3355.195	-26.520	0.000	5382.561	0.000	0.000
42.	9759.215	2.540	0.000	3329.511	-20.890	0.000	5382.561	0.000	0.000
43.	9768.506	1.690	0.000	3311.017	-14.410	0.000	5382.561	0.000	0.000
44.	9768.282	0.850	0.000	3299.451	-7.170	0.000	5382.561	0.000	0.000
45.	9769.541	0.000	0.000	3296.112	0.000	0.000	5382.561	0.000	0.000
46.	9768.282	-0.850	0.000	3299.861	7.170	0.000	5382.561	0.000	0.000
47.	9766.506	-1.690	0.000	3311.017	14.410	0.000	5382.561	0.000	0.000
48.	9759.215	-2.540	0.000	3329.511	20.890	0.000	5382.561	0.000	0.000
49.	9749.414	-3.380	0.000	3355.195	26.520	0.000	5382.561	0.000	0.000

Z-PLANE (XV-PLANE) RUTLE

	LWSEL	LMZ12	LMZ13	FSRVEL	FSPM12	FSPM13	SSRWEL	SSPM12	SSPM13
50.	3738.107	-4.239	0.000	3307.872	31.600	0.000	5382.561	-0.000	0.000
51.	3726.302	-5.079	0.000	3427.206	35.520	0.000	5382.561	0.000	0.000
52.	3708.007	-5.910	0.000	3473.194	38.960	0.000	5382.561	-0.000	0.000
53.	3689.233	-6.750	0.000	3525.220	41.790	0.000	5382.561	0.000	0.000
54.	3667.992	-7.598	0.000	3583.064	44.110	0.000	5382.561	-0.000	0.000
55.	3644.297	-8.429	0.000	3646.362	46.000	0.000	5382.561	0.000	0.000
56.	3618.164	-9.250	0.000	3714.745	47.520	0.000	5382.561	-0.000	0.000
57.	3589.511	-10.080	0.000	3787.844	48.730	0.000	5382.561	0.000	0.000
58.	3559.559	-10.910	0.000	3865.289	49.680	0.000	5382.561	-0.000	0.000
59.	3528.327	-11.730	0.000	3946.716	50.410	0.000	5382.561	0.000	0.000
60.	3495.643	-12.540	0.000	4031.761	50.950	0.000	5382.561	-0.000	0.000
61.	3461.631	-13.340	0.000	4120.884	51.330	0.000	5382.561	0.000	0.000
62.	3426.339	-14.160	0.000	4213.346	51.570	0.000	5382.561	-0.000	0.000
63.	3389.749	-14.960	0.000	4305.225	51.680	0.000	5382.561	0.000	0.000
64.	3351.948	-15.750	0.000	4404.410	51.600	0.000	5382.561	-0.000	0.000
65.	3312.959	-16.530	0.000	4499.605	51.610	0.000	5382.561	0.000	0.000
66.	3272.927	-17.310	0.000	4599.524	51.440	0.000	5382.561	-0.000	0.000
67.	3231.502	-18.070	0.000	4700.897	51.190	0.000	5382.561	0.000	0.000
68.	3188.339	-18.820	0.000	4803.447	50.870	0.000	5382.561	-0.000	0.000
69.	3143.099	-19.550	0.000	4906.932	50.490	0.000	5382.561	0.000	0.000
70.	3095.955	-20.270	0.000	5011.098	50.050	0.000	5382.561	-0.000	0.000
71.	3047.945	-20.960	0.000	5115.699	49.550	0.000	5382.561	0.000	0.000
72.	2998.280	-21.630	0.000	5220.493	48.990	0.000	5382.561	-0.000	0.000
73.	2947.947	-22.270	0.000	5325.232	48.390	0.000	5382.561	0.000	0.000
74.	2895.109	-22.890	0.000	5429.665	47.710	0.000	5382.561	-0.000	0.000
75.	2840.911	-23.440	0.000	5533.531	46.990	0.000	5382.561	0.000	0.000
76.	2785.525	-23.940	0.000	5636.547	46.170	0.000	5382.561	-0.000	0.000
77.	2728.159	-24.390	0.000	5738.404	45.290	0.000	5382.561	0.000	0.000
78.	2668.064	-24.740	0.000	5838.771	44.310	0.000	5382.561	-0.000	0.000
79.	2605.565	-25.090	0.000	5937.243	43.220	0.000	5382.561	0.000	0.000
80.	2541.060	-25.110	0.000	6034.359	41.980	0.000	5382.561	-0.000	0.000
81.	2472.900	-25.040	0.000	6126.559	40.560	0.000	5382.561	0.000	0.000
82.	2400.045	-24.730	0.000	6216.155	38.990	0.000	5382.561	-0.000	0.000
83.	2322.020	-24.110	0.000	6301.243	36.490	0.000	5382.561	0.000	0.000
84.	2239.948	-23.050	0.000	6380.853	34.440	0.000	5382.561	-0.000	0.000
85.	2154.194	-21.430	0.000	6453.490	31.350	0.000	5382.561	0.000	0.000
86.	2065.615	-19.050	0.000	6517.448	27.420	0.000	5382.561	-0.000	0.000
87.	1965.615	-15.740	0.000	6570.915	22.390	0.000	5382.561	0.000	0.000
88.	1852.021	-11.360	0.000	6611.228	16.060	0.000	5382.561	-0.000	0.000
89.	1728.779	-5.990	0.000	6636.566	8.460	0.000	5382.561	0.000	0.000
90.	1593.497	0.000	0.000	6645.215	-0.000	0.000	5382.561	-0.000	0.000
91.	1447.779	5.990	0.000	6636.566	-8.440	0.000	5382.561	0.000	0.000
92.	1292.021	11.360	0.000	6611.228	-16.060	0.000	5382.561	-0.000	0.000
93.	1125.615	15.740	0.000	6570.915	-22.390	0.000	5382.561	0.000	0.000
94.	948.416	19.050	0.000	6517.448	-27.420	0.000	5382.561	-0.000	0.000
95.	761.199	21.430	0.000	6453.490	-31.350	0.000	5382.561	0.000	0.000
96.	563.958	23.050	0.000	6380.853	-34.440	0.000	5382.561	-0.000	0.000
97.	356.020	24.110	0.000	6301.243	-36.490	0.000	5382.561	0.000	0.000
98.	137.739	24.730	0.000	6216.155	-38.990	0.000	5382.561	-0.000	0.000
99.	3292.990	25.060	0.000	6126.559	-40.560	0.000	5382.561	0.000	0.000

7-PLANE (XY-PLANE) PROFILE

	LNGDEL	LOWI12	LOWI13	FSDEL	FSDI12	FSDI13	SSDEL	SSDI12	SSDI13
100.	9361.040	25.119	0.000	6033.359	-41.944	0.000	5382.561	0.000	0.000
101.	9429.555	24.990	0.010	5977.243	-43.220	0.000	5382.561	0.000	0.000
102.	9498.068	24.740	0.000	5918.771	-44.310	0.000	5382.561	0.000	0.000
103.	9566.159	24.300	0.030	5838.408	-45.200	0.000	5382.561	0.000	0.000
104.	9633.525	23.940	0.000	5766.547	-46.170	0.000	5382.561	-0.000	0.000
105.	9699.911	23.440	0.000	5633.571	-46.980	0.000	5382.561	0.000	0.000
106.	9765.109	22.840	0.010	5529.666	-47.710	0.000	5382.561	0.000	0.000
107.	9828.947	22.270	0.000	5425.212	-48.190	0.000	5382.561	0.000	0.000
108.	9891.240	21.570	0.000	5320.493	-49.000	0.000	5382.561	0.000	0.000
109.	9951.345	21.950	0.000	5215.599	-49.550	0.000	5382.561	0.000	0.000
110.	9910.955	20.270	0.000	5011.098	-50.050	0.000	5382.561	0.000	0.000
111.	9868.099	19.550	0.000	4806.932	-50.490	0.000	5382.561	-0.000	0.000
112.	9823.339	18.920	0.010	4603.447	-50.870	0.000	5382.561	0.000	0.000
113.	9776.602	18.070	0.000	4400.892	-51.190	0.000	5382.561	0.000	0.000
114.	9727.827	17.310	0.000	4200.524	-51.440	0.000	5382.561	0.000	0.000
115.	9676.959	16.530	0.000	4000.505	-51.610	0.000	5382.561	0.000	0.000
116.	9623.948	15.750	0.000	3801.410	-51.690	0.000	5382.561	0.000	0.000
117.	9568.760	14.960	0.000	3605.225	-51.690	0.000	5382.561	0.000	0.000
118.	9511.322	14.160	0.000	3411.345	-51.570	0.000	5382.561	-0.000	0.000
119.	9451.531	13.360	0.000	3218.044	-51.370	0.000	5382.561	0.000	0.000
120.	9389.643	12.540	0.000	3025.761	-50.950	0.000	5382.561	0.000	0.000
121.	9325.327	11.770	0.000	2834.714	-50.410	0.000	5382.561	0.000	0.000
122.	9258.559	10.910	0.010	2645.299	-49.580	0.000	5382.561	0.000	0.000
123.	9189.511	10.040	0.000	2457.944	-48.730	0.000	5382.561	0.000	0.000
124.	9118.154	9.250	0.000	2272.745	-47.520	0.000	5382.561	0.000	0.000
125.	9044.287	8.420	0.000	2089.362	-45.000	0.000	5382.561	0.000	0.000
126.	8967.992	7.590	0.000	1908.064	-44.110	0.000	5382.561	0.000	0.000
127.	8889.233	6.750	0.000	1729.220	-41.790	0.000	5382.561	0.000	0.000
128.	8808.007	5.910	0.000	1552.184	-39.960	0.000	5382.561	0.000	0.000
129.	8724.302	5.070	0.000	1377.296	-35.520	0.000	5382.561	0.000	0.000
130.	8638.107	4.230	0.000	1204.872	-31.400	0.000	5382.561	0.000	0.000
131.	8549.414	3.380	0.000	1035.196	-25.520	0.000	5382.561	0.000	0.000
132.	8458.215	2.540	0.000	869.511	-20.840	0.000	5382.561	0.000	0.000
133.	8365.506	1.590	0.000	707.017	-14.410	0.000	5382.561	0.000	0.000
134.	8270.282	0.850	0.000	548.861	-7.370	0.000	5382.561	-0.000	0.000
135.	8172.541	-0.700	0.000	394.861	7.370	0.000	5382.561	0.000	0.000
136.	8072.282	-1.550	0.000	246.861	14.410	0.000	5382.561	0.000	0.000
137.	7969.506	-2.340	0.000	104.861	20.840	0.000	5382.561	0.000	0.000
138.	7854.215	-3.180	0.000	-81.861	26.520	0.000	5382.561	-0.000	0.000
139.	7727.414	-4.070	0.000	-229.861	31.400	0.000	5382.561	0.000	0.000
140.	7589.107	-4.970	0.000	-377.296	35.520	0.000	5382.561	0.000	0.000
141.	7439.302	-5.870	0.000	-524.872	38.960	0.000	5382.561	0.000	0.000
142.	7278.007	-6.750	0.000	-672.184	41.790	0.000	5382.561	-0.000	0.000
143.	7105.233	-7.590	0.000	-819.345	44.110	0.000	5382.561	0.000	0.000
144.	6921.992	-8.420	0.000	-966.064	45.000	0.000	5382.561	0.000	0.000
145.	6728.215	-9.250	0.000	-1112.745	47.520	0.000	5382.561	-0.000	0.000
146.	6523.948	-10.040	0.000	-1259.714	49.580	0.000	5382.561	0.000	0.000
147.	6308.511	-10.910	0.000	-1406.299	50.410	0.000	5382.561	0.000	0.000
148.	6081.559	-11.730	0.000	-1552.714					
149.	5843.327								

7-PLANE (XY-PLANE) RUTILE

	LANGVEL	LPMT12	LPMT13	FSPVEL	FSPMT12	FSPMT13	SSRVEL	SSPM12	SSPM13
150.	3494.543	-12.569	0.018	4931.761	50.950	0.000	5382.561	0.000	0.000
151.	3451.631	-13.360	0.030	4120.084	51.370	0.000	5382.561	0.000	0.000
152.	3411.722	-14.160	0.000	4211.145	51.670	0.000	5382.561	0.000	0.000
153.	3368.749	-14.960	0.030	4305.225	51.680	0.000	5382.561	0.000	0.000
154.	3323.948	-15.750	0.000	4401.410	51.690	0.000	5382.561	0.000	0.000
155.	3276.959	-16.530	0.000	4499.605	51.619	0.000	5382.561	0.000	0.000
156.	3227.827	-17.310	0.000	4598.524	51.449	0.000	5382.561	0.000	0.000
157.	3176.602	-18.070	0.010	4700.192	51.199	0.000	5382.561	0.000	0.000
158.	3123.339	-18.820	0.000	4803.447	50.870	0.000	5382.561	0.000	0.000
159.	3068.099	-19.550	0.000	4906.932	50.400	0.000	5382.561	0.000	0.000
160.	3010.955	-20.270	0.010	5011.098	50.050	0.000	5382.561	0.000	0.000
161.	2951.985	-20.960	0.010	5115.699	49.559	0.000	5382.561	0.000	0.000
162.	2891.280	-21.630	0.010	5220.493	49.009	0.000	5382.561	0.000	0.000
163.	2829.947	-22.270	0.000	5325.232	48.399	0.000	5382.561	0.000	0.000
164.	2765.109	-22.880	0.000	5429.666	47.710	0.000	5382.561	0.000	0.000
165.	2699.911	-23.440	0.010	5533.531	46.980	0.000	5382.561	0.000	0.000
166.	2633.525	-23.940	0.000	5636.547	46.170	0.000	5382.561	0.000	0.000
167.	2566.159	-24.390	0.000	5738.408	45.290	0.000	5382.561	0.000	0.000
168.	2498.064	-24.740	0.000	5838.771	44.310	0.000	5382.561	0.000	0.000
169.	2429.565	-24.990	0.000	5937.243	43.220	0.000	5382.561	0.000	0.000
170.	2361.040	-25.110	0.000	6033.359	41.980	0.000	5382.561	0.000	0.000
171.	2292.990	-25.040	0.000	6126.559	40.560	0.000	5382.561	0.000	0.000
172.	2225.045	-24.770	0.000	6216.155	38.990	0.000	5382.561	0.000	0.000
173.	2151.020	-24.110	0.000	6301.283	36.890	0.000	5382.561	0.000	0.000
174.	2098.958	-23.050	0.000	6380.853	34.640	0.000	5382.561	0.000	0.000
175.	2041.199	-21.430	0.000	6453.400	31.750	0.000	5382.561	0.000	0.000
176.	1989.416	-19.050	0.010	6517.494	27.420	0.000	5382.561	0.000	0.000
177.	1945.615	-15.740	0.000	6578.615	22.390	0.000	5382.561	0.000	0.000
178.	1912.021	-11.360	0.000	6611.228	16.060	0.000	5382.561	0.000	0.000
179.	1890.779	-5.990	0.010	6636.566	8.449	0.000	5382.561	0.000	0.000
180.	1883.497	0.000	0.000	6645.215	-0.009	0.000	5382.561	0.000	0.000

X-PLANE (YZ-PLANE) SAPPHIRE

BULK

	LNQVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	11192.366	4.650	-0.000	6467.934	-8.030	-0.000	6044.632	-8.650	0.000
1.	11207.665	4.360	-0.000	6451.889	-8.160	-0.000	6033.526	-9.550	0.000
2.	11221.762	3.940	-0.000	6435.552	-8.330	-0.000	6024.391	-4.370	0.000
3.	11234.639	3.580	-0.000	6419.000	-8.460	-0.000	6017.460	-3.170	0.000
4.	11246.200	3.210	0.000	6402.232	-8.590	-0.000	6012.753	-1.560	0.000
5.	11256.675	2.850	0.000	6385.266	-8.700	-0.000	6013.266	-7.700	0.000
6.	11265.815	2.480	0.000	6368.125	-8.810	-0.000	6010.081	-4.700	0.000
7.	11273.694	2.110	0.000	6350.824	-8.910	-0.000	6012.074	1.710	0.000
8.	11280.312	1.740	0.000	6333.385	-9.000	-0.000	6016.309	2.510	0.000
9.	11285.670	1.360	0.000	6315.827	-9.080	-0.000	6022.744	4.090	0.000
10.	11289.772	1.010	0.000	6298.172	-9.150	-0.000	6031.347	5.290	0.000
11.	11292.626	.650	0.000	6280.439	-9.210	-0.000	6042.075	6.370	0.000
12.	11294.243	.290	0.000	6262.651	-9.260	-0.000	6054.600	7.450	0.000
13.	11294.637	-.060	0.000	6244.827	-9.290	-0.000	6065.704	8.490	0.000
14.	11293.826	-.410	0.000	6226.991	-9.320	-0.000	6086.482	9.460	0.000
15.	11291.630	-.750	0.000	6209.163	-9.340	-0.000	6105.136	10.410	0.000
16.	11288.674	-1.080	0.000	6191.365	-9.360	-0.000	6125.594	11.280	0.000
17.	11284.364	-1.410	0.000	6173.620	-9.370	-0.000	6147.761	12.090	0.000
18.	11278.992	-1.730	0.000	6155.930	-9.370	0.000	6171.545	12.640	-0.000
19.	11272.532	-2.030	0.000	6138.376	-9.290	0.000	6196.099	13.530	-0.000
20.	11265.041	-2.330	0.000	6120.922	-9.240	0.000	6223.555	14.150	-0.000
21.	11256.561	-2.610	0.000	6103.605	-9.190	0.000	6251.563	14.700	-0.000
22.	11247.137	-2.860	0.000	6086.460	-9.120	0.000	6280.731	15.160	-0.000
23.	11236.816	-3.140	0.000	6069.496	-9.040	0.000	6314.597	15.590	-0.000
24.	11225.655	-3.360	0.000	6052.744	-8.950	0.000	6342.175	15.930	-0.000
25.	11213.706	-3.610	0.000	6036.221	-8.850	0.000	6374.155	16.210	-0.000
26.	11201.029	-3.810	0.000	6019.951	-8.730	0.000	6406.001	16.410	-0.000
27.	11187.690	-4.000	0.000	6003.956	-8.600	0.000	6437.976	16.590	-0.000
28.	11173.755	-4.170	0.000	5988.256	-8.460	-0.000	6473.536	16.610	-0.000
29.	11159.296	-4.310	0.000	5972.878	-8.300	-0.000	6517.344	16.610	-0.000
30.	11144.369	-4.440	0.000	5957.836	-8.130	-0.000	6541.247	16.540	-0.000
31.	11129.112	-4.540	0.000	5943.156	-7.950	-0.000	6575.180	16.400	-0.000
32.	11113.545	-4.620	0.000	5928.859	-7.760	-0.000	6610.750	16.200	-0.000
33.	11097.784	-4.670	0.000	5914.962	-7.550	-0.000	6642.049	15.920	-0.000
34.	11081.907	-4.700	0.000	5901.486	-7.340	-0.000	6674.842	15.580	-0.000
35.	11066.010	-4.700	0.000	5888.450	-7.100	-0.000	6706.978	15.160	-0.000
36.	11050.160	-4.610	0.000	5875.875	-6.860	-0.000	6736.304	14.710	-0.000
37.	11034.535	-4.610	0.000	5863.776	-6.610	-0.000	6768.659	14.170	-0.000
38.	11019.150	-4.520	0.000	5852.174	-6.340	-0.000	6797.933	13.570	-0.000
39.	11004.131	-4.410	0.000	5841.084	-6.060	-0.000	6825.917	12.910	-0.000
40.	10989.577	-4.260	0.000	5830.523	-5.770	0.000	6852.509	12.190	-0.000
41.	10975.585	-4.000	0.000	5820.507	-5.460	0.000	6877.526	11.410	-0.000
42.	10962.252	-3.800	0.000	5811.051	-5.170	0.000	6900.925	10.570	-0.000
43.	10949.669	-3.650	0.000	5802.169	-4.850	0.000	6922.465	9.660	-0.000
44.	10937.926	-3.390	0.000	5793.875	-4.520	0.000	6942.114	8.740	-0.000
45.	10927.111	-3.100	0.000	5786.162	-4.180	0.000	6959.701	7.790	-0.000
46.	10917.295	-2.790	0.000	5779.100	-3.840	0.000	6975.139	6.710	-0.000
47.	10908.562	-2.460	0.000	5772.642	-3.490	0.000	6986.337	5.640	-0.000
48.	10900.964	-2.110	0.000	5766.817	-3.130	0.000	6993.212	4.540	-0.000
49.	10894.556	-1.750	0.000	5761.634	-2.770	0.000	7007.638	3.400	-0.000

X-PLANE (YZ-PLANE) SAPPHIRE

BULK

	LNGVEL	LPMI12	LPMI13	FSRVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13
50.	10809.389	-1.370	-0.000	5757.101	-2.400	0.000	7013.738	2.250	0.000
51.	10885.490	-0.980	-0.000	5753.225	-2.020	0.000	7017.293	1.000	0.000
52.	10882.882	-0.590	-0.000	5750.012	-1.640	0.000	7018.338	-1.100	0.000
53.	10881.576	-0.200	-0.000	5747.466	-1.260	0.000	7018.865	-1.280	0.000
54.	10881.570	0.150	-0.000	5745.596	-0.880	0.000	7012.878	-2.450	0.000
55.	10882.850	0.560	-0.000	5744.399	-0.490	0.000	7006.402	-3.610	0.000
56.	10885.389	0.950	-0.000	5743.880	-0.100	0.000	6997.472	-4.750	0.000
57.	10889.153	1.310	-0.000	5744.036	0.280	0.000	6986.141	-5.860	0.000
58.	10894.093	1.660	-0.000	5744.874	0.670	0.000	6972.477	-6.940	0.000
59.	10900.152	1.990	-0.000	5746.386	1.060	0.000	6956.559	-7.980	0.000
60.	10907.266	2.290	-0.000	5748.572	1.440	0.000	6938.400	-8.970	0.000
61.	10915.360	2.570	-0.000	5751.429	1.820	0.000	6918.343	-9.920	0.000
62.	10924.355	2.830	-0.000	5754.952	2.200	0.000	6896.204	-10.820	0.000
63.	10934.165	3.060	-0.000	5759.135	2.570	0.000	6872.365	-11.670	0.000
64.	10944.701	3.260	-0.000	5763.972	2.940	0.000	6846.777	-12.450	0.000
65.	10955.869	3.430	-0.000	5769.456	3.300	0.000	6819.639	-13.180	0.000
66.	10967.575	3.570	-0.000	5775.576	3.650	0.000	6791.094	-13.840	0.000
67.	10979.721	3.680	-0.000	5782.329	4.000	0.000	6761.269	-14.440	0.000
68.	10992.211	3.770	-0.000	5789.697	4.340	0.000	6730.377	-14.970	0.000
69.	11004.947	3.820	-0.000	5797.673	4.670	0.000	6698.512	-15.440	0.000
70.	11017.836	3.850	-0.000	5806.242	5.000	0.000	6665.050	-15.840	0.000
71.	11030.782	3.850	-0.000	5815.394	5.310	0.000	6632.049	-16.170	0.000
72.	11043.695	3.820	-0.000	5825.113	5.620	0.000	6598.765	-16.430	0.000
73.	11056.485	3.770	-0.000	5835.385	5.910	0.000	6564.658	-16.630	0.000
74.	11069.066	3.690	-0.000	5846.195	6.190	0.000	6530.303	-16.750	0.000
75.	11081.356	3.590	-0.000	5857.526	6.470	0.000	6496.047	-16.800	0.000
76.	11093.276	3.460	-0.000	5869.363	6.730	0.000	6461.922	-16.790	0.000
77.	11104.750	3.320	-0.000	5881.686	6.980	0.000	6428.101	-16.700	0.000
78.	11115.707	3.150	-0.000	5894.475	7.210	0.000	6394.692	-16.540	0.000
79.	11126.070	2.960	-0.000	5907.722	7.440	0.000	6361.873	-16.300	0.000
80.	11135.799	2.760	-0.000	5921.397	7.650	0.000	6329.705	-16.000	0.000
81.	11144.811	2.540	-0.000	5935.484	7.850	0.000	6298.567	-15.620	0.000
82.	11153.056	2.310	-0.000	5949.963	8.040	0.000	6268.355	-15.170	0.000
83.	11160.484	2.060	-0.000	5964.814	8.210	0.000	6239.279	-14.650	0.000
84.	11167.045	1.800	-0.000	5980.016	8.360	0.000	6211.404	-14.060	0.000
85.	11172.694	1.520	-0.000	5995.547	8.530	0.000	6185.932	-13.390	0.000
86.	11177.390	1.240	-0.000	6011.386	8.680	0.000	6160.946	-12.660	0.000
87.	11181.097	0.940	-0.000	6027.512	8.790	0.000	6136.765	-11.880	0.000
88.	11183.780	0.630	-0.000	6043.503	8.900	0.000	6115.141	-11.000	0.000
89.	11185.488	0.320	-0.000	6060.536	9.000	0.000	6095.320	-10.070	0.000
90.	11186.957	-0.000	-0.000	6077.390	9.080	0.000	6077.390	-9.080	0.000
91.	11188.401	-0.330	-0.000	6094.443	9.160	0.000	6061.432	-8.040	0.000
92.	11189.722	-0.660	-0.000	6111.671	9.220	0.000	6047.516	-6.950	0.000
93.	11190.903	-1.000	-0.000	6129.052	9.270	0.000	6035.712	-5.820	0.000
94.	11191.931	-1.340	-0.000	6146.565	9.300	0.000	6026.071	-4.640	0.000
95.	11191.797	-1.680	-0.000	6164.187	9.330	0.000	6016.641	-3.440	0.000
96.	11191.494	-2.020	-0.000	6181.895	9.340	0.000	6013.459	-2.210	0.000
97.	11191.016	-2.370	-0.000	6199.667	9.340	0.000	6013.459	-1.000	0.000
98.	11190.371	-2.720	-0.000	6217.482	9.330	0.000	6009.946	0.300	0.000
99.	11189.556	-3.060	-0.000	6235.316	9.310	0.000	6011.642	1.500	0.000

X-PLANE (YZ-PLANE) SAPPHIRE

	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
100.	11128.580	-3.400	-0.000	6253.199	9.230	6015.643	2.610	-0.000
101.	11116.494	-3.740	-0.000	6270.999	9.230	6021.937	4.050	-0.000
102.	11103.192	-4.080	-0.000	6288.724	9.110	6030.905	5.260	-0.000
103.	11088.810	-4.410	-0.000	6306.423	9.000	6041.316	6.450	-0.000
104.	11073.331	-4.740	-0.000	6324.036	8.900	6054.331	7.620	-0.000
105.	11056.779	-5.060	-0.000	6341.541	8.800	6069.001	8.710	-0.000
106.	11039.183	-5.370	-0.000	6358.918	8.660	6086.767	9.770	-0.000
107.	11020.575	-5.670	-0.000	6376.147	8.760	6106.062	10.780	-0.000
108.	11000.991	-5.960	-0.000	6393.209	8.650	6127.308	11.720	-0.000
109.	10980.474	-6.240	-0.000	6410.084	8.530	6150.421	12.610	-0.000
110.	10959.067	-6.510	-0.000	6426.753	8.400	6175.307	13.430	-0.000
111.	10936.820	-6.770	-0.000	6443.196	8.260	6201.662	14.180	-0.000
112.	10913.769	-7.000	-0.000	6459.400	8.110	6229.379	14.860	-0.000
113.	10890.031	-7.230	-0.000	6475.341	7.960	6259.536	15.470	-0.000
114.	10865.611	-7.430	-0.000	6491.004	7.800	6290.414	16.010	-0.000
115.	10840.599	-7.610	-0.000	6506.372	7.630	6322.476	16.480	-0.000
116.	10815.071	-7.770	-0.000	6521.429	7.460	6355.583	16.890	-0.000
117.	10789.105	-7.910	-0.000	6536.156	7.270	6389.540	17.150	-0.000
118.	10762.790	-8.020	-0.000	6550.583	7.080	6424.345	17.370	-0.000
119.	10736.216	-8.100	-0.000	6564.569	6.890	6459.687	17.520	-0.000
120.	10709.467	-8.150	-0.000	6578.223	6.690	6495.453	17.580	-0.000
121.	10682.704	-8.170	-0.000	6591.468	6.480	6531.471	17.570	-0.000
122.	10655.979	-8.160	-0.000	6604.353	6.270	6567.365	17.470	-0.000
123.	10629.430	-8.100	-0.000	6616.802	6.050	6603.555	17.290	-0.000
124.	10603.182	-8.010	-0.000	6628.824	5.830	6639.254	17.030	-0.000
125.	10577.365	-7.890	-0.000	6640.406	5.610	6674.471	16.680	-0.000
126.	10552.114	-7.740	-0.000	6651.537	5.360	6709.013	16.250	-0.000
127.	10527.570	-7.450	-0.000	6662.205	5.130	6742.684	15.740	-0.000
128.	10503.076	-7.220	-0.000	6672.399	4.890	6773.264	15.140	-0.000
129.	10481.187	-6.900	-0.000	6682.119	4.640	6806.616	14.480	-0.000
130.	10459.647	-6.540	-0.000	6691.326	4.390	6836.479	13.690	-0.000
131.	10439.410	-6.120	-0.000	6700.041	4.140	6864.679	12.840	-0.000
132.	10420.625	-5.650	-0.000	6708.243	3.880	6891.023	11.950	-0.000
133.	10403.440	-5.140	-0.000	6715.927	3.620	6915.325	10.890	-0.000
134.	10387.997	-4.580	-0.000	6723.084	3.360	6937.410	9.690	-0.000
135.	10374.426	-3.980	-0.000	6729.706	3.100	6957.111	8.460	-0.000
136.	10362.859	-3.330	-0.000	6735.786	2.830	6974.276	7.420	-0.000
137.	10353.396	-2.650	-0.000	6741.324	2.560	6986.770	6.140	-0.000
138.	10346.183	-1.940	-0.000	6746.308	2.290	7000.477	4.610	-0.000
139.	10341.171	-1.210	-0.000	6750.735	2.020	7009.302	3.440	-0.000
140.	10338.535	-0.480	-0.000	6754.601	1.740	7015.173	2.150	-0.000
141.	10336.285	1.060	-0.000	6757.903	1.470	7019.042	0.840	-0.000
142.	10340.424	1.810	-0.000	6760.636	1.190	7017.889	-0.780	-0.000
143.	10344.946	2.550	-0.000	6762.799	0.910	7014.720	-2.160	-0.000
144.	10351.627	3.260	-0.000	6764.390	0.630	7006.565	-3.570	-0.000
145.	10361.010	3.950	-0.000	6765.406	0.350	6999.462	-4.920	-0.000
146.	10372.424	4.600	-0.000	6765.847	-0.070	6987.551	-6.230	-0.000
147.	10385.979	5.210	-0.000	6765.713	-0.200	6972.874	-7.490	-0.000
148.	10401.566	5.760	-0.000	6765.003	-0.480	6955.576	-8.690	-0.000
149.	10419.072		-0.000	6763.719	-0.760	6935.794	-9.830	-0.000

BULK

X-PLANE (YZ-PLANE) SAPPHIRE

	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
150.	10438.359	0.000	6761.861	-1.041	-0.000	6713.686	-10.690	-0.000
151.	10459.286	0.000	6759.431	-1.320	-0.000	6889.417	-11.880	-0.000
152.	10481.714	0.000	6756.432	-1.590	-0.000	6863.165	-12.790	0.000
153.	10505.484	0.000	6752.867	-1.870	-0.000	6835.113	-13.610	0.000
154.	10530.444	0.000	6748.738	-2.140	-0.000	6805.451	-14.360	0.000
155.	10556.452	0.000	6744.850	-2.420	-0.000	6774.371	-15.020	0.000
156.	10583.347	0.000	6738.808	-2.690	-0.000	6742.067	-15.600	0.000
157.	10610.983	0.000	6733.017	-2.950	-0.000	6700.731	-16.100	-0.000
158.	10639.216	0.000	6726.682	-3.220	0.000	6674.526	-16.510	-0.000
159.	10667.911	0.000	6719.809	-3.460	0.000	6634.732	-16.640	-0.000
160.	10696.932	0.000	6712.406	-3.740	0.000	6604.451	-17.100	-0.000
161.	10726.145	0.000	6704.479	-4.000	0.000	6560.069	-17.270	-0.000
162.	10755.436	0.000	6696.036	-4.260	0.000	6533.227	-17.360	-0.000
163.	10784.685	0.000	6687.086	-4.510	0.000	6497.039	-17.360	-0.000
164.	10813.785	0.000	6677.638	-4.760	0.000	6462.296	-17.320	-0.000
165.	10842.632	0.000	6667.730	-5.000	0.000	6421.359	-17.100	-0.000
166.	10871.125	0.000	6657.284	-5.240	0.000	6382.509	-16.560	-0.000
167.	10899.185	0.000	6646.395	-5.470	0.000	6343.337	-16.670	-0.000
168.	10926.715	0.000	6635.056	-5.700	0.000	6320.549	-16.310	-0.000
169.	10953.640	0.000	6623.267	-5.930	0.000	6294.766	-15.670	-0.000
170.	10979.867	0.000	6611.044	-6.150	0.000	6264.123	-15.360	-0.000
171.	11005.367	0.000	6598.395	-6.370	0.000	6234.745	-14.700	-0.000
172.	11030.077	0.000	6585.346	-6.580	0.000	6206.725	-14.120	-0.000
173.	11053.896	0.000	6571.897	-6.780	0.000	6184.265	-13.460	-0.000
174.	11076.797	0.000	6558.066	-6.960	0.000	6157.303	-12.620	-0.000
175.	11098.725	0.000	6543.872	-7.170	0.000	6132.207	-11.770	-0.000
176.	11119.636	0.000	6529.325	-7.360	0.000	6110.020	-10.860	-0.000
177.	11139.490	0.000	6514.441	-7.540	0.000	6091.330	-9.890	-0.000
178.	11158.251	0.000	6499.237	-7.710	0.000	6073.786	-8.870	-0.000
179.	11175.886	0.000	6483.725	-7.860	0.000	6050.270	-7.800	-0.000
180.	11192.366	0.000	6467.934	-8.030	0.000	6044.632	-6.690	-0.000

Y-PLANE (XZ-PLANE) SAPPHIRE

	LNGVEL	LPHI12	LPHI13	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	11174.720	0.000	0.000	0.000	0.000	5743.655	0.000	0.000
1.	11174.216	-0.300	0.250	-1.180	-0.390	5744.930	1.230	-0.400
2.	11172.705	-0.500	0.500	-1.360	-0.700	5746.147	2.440	-0.700
3.	11170.192	-0.890	0.740	-1.530	-1.170	5753.491	3.620	-1.100
4.	11168.683	-1.160	0.990	-1.700	-1.560	5760.931	4.820	-1.200
5.	11162.189	-1.470	1.240	-1.870	-1.950	5770.430	5.980	-1.260
6.	11156.722	-1.750	1.480	-1.830	-2.330	5781.335	7.050	-2.340
7.	11150.295	-2.030	1.730	-1.180	-2.710	5792.365	8.100	-2.710
8.	11142.939	-2.300	1.970	-1.320	-3.060	5810.704	9.090	-3.060
9.	11134.662	-2.570	2.220	-1.440	-3.450	5827.806	10.020	-3.450
10.	11125.494	-2.830	2.460	-1.560	-3.810	5846.595	10.670	-3.810
11.	11115.464	-3.080	2.690	-1.650	-4.170	5866.050	11.650	-4.170
12.	11104.601	-3.330	2.930	-1.720	-4.510	5886.774	12.350	-4.510
13.	11092.941	-3.560	3.170	-1.770	-4.850	5911.905	12.960	-4.850
14.	11080.522	-3.760	3.400	-1.790	-5.170	5936.199	13.470	-5.170
15.	11067.363	-3.950	3.630	-1.770	-5.470	5961.493	13.890	-5.470
16.	11053.570	-4.150	3.850	-1.710	-5.760	5987.593	14.290	-5.760
17.	11039.130	-4.370	4.070	-1.600	-6.030	6014.302	14.600	-6.030
18.	11024.116	-4.540	4.290	-1.430	-6.270	6041.400	14.820	-6.470
19.	11008.580	-4.650	4.500	-1.150	-6.490	6068.630	14.410	-6.630
20.	10992.594	-4.830	4.710	-0.860	-6.670	6095.721	14.200	-6.810
21.	10976.187	-4.940	4.910	-0.570	-6.810	6122.374	13.840	-7.030
22.	10959.457	-5.040	5.110	-0.270	-6.910	6148.200	13.310	-7.240
23.	10942.462	-5.120	5.290	-0.070	-6.970	6173.030	12.600	-7.340
24.	10925.276	-5.170	5.470	0.140	-6.970	6196.317	11.710	-7.410
25.	10907.975	-5.200	5.620	0.260	-6.910	6217.755	10.640	-7.450
26.	10890.639	-5.210	5.810	0.260	-6.800	6236.997	9.410	-7.350
27.	10873.352	-5.150	5.960	0.200	-6.640	6253.743	8.040	-7.140
28.	10856.196	-5.140	6.100	0.220	-6.440	6267.770	6.560	-6.900
29.	10839.266	-5.070	6.240	0.190	-6.200	6278.253	5.160	-6.630
30.	10822.651	-4.970	6.350	0.070	-5.930	6287.278	3.610	-6.340
31.	10806.442	-4.840	6.460	0.070	-5.650	6292.832	2.200	-6.000
32.	10790.735	-4.680	6.550	0.390	-5.370	6295.767	0.500	-5.730
33.	10775.624	-4.450	6.630	0.750	-5.070	6296.371	-0.270	-5.420
34.	10761.204	-4.260	6.690	1.000	-4.770	6294.639	-1.310	-5.120
35.	10747.571	-4.030	6.730	0.930	-4.470	6291.450	-2.210	-4.810
36.	10734.817	-3.750	6.760	0.500	-4.170	6286.452	-2.990	-4.500
37.	10723.032	-3.450	6.770	0.620	-3.850	6280.072	-3.650	-4.190
38.	10712.302	-3.120	6.760	0.210	-3.520	6272.514	-4.220	-3.880
39.	10702.708	-2.760	6.740	0.280	-3.180	6263.956	-4.710	-3.570
40.	10694.326	-2.380	6.690	0.590	-2.830	6254.554	-5.120	-3.260
41.	10687.223	-1.960	6.630	0.950	-2.470	6244.444	-5.460	-2.950
42.	10681.461	-1.560	6.550	1.330	-2.100	6233.744	-5.750	-2.640
43.	10677.090	-1.130	6.450	1.670	-1.690	6222.557	-5.990	-2.330
44.	10674.150	-0.680	6.330	1.980	-1.260	6210.976	-6.190	-2.020
45.	10672.671	-0.230	6.200	2.610	-0.850	6194.002	-6.340	-1.710
46.	10672.670	0.230	6.050	1.620	-0.420	6186.946	-6.460	-1.400
47.	10674.154	0.680	5.890	0.610	0.030	6174.639	-6.550	-1.100
48.	10677.117	1.140	5.740	-0.200	0.490	6162.219	-6.610	-0.790
49.	10681.539	1.560	5.520	-1.220	0.550	6149.741	-6.640	-0.480

Y-PLANE (XZ-PLANE) SAPPHIRE

BULK

	LNQVEL	LPH12	LPH13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
50.	10667.390	2.010	5.330	7002.086	-2.240	1.420	6137.261	-6.640	-17.400
51.	10694.630	2.430	5.120	6996.234	-3.240	1.880	6124.626	-6.610	-17.500
52.	10703.204	2.830	4.910	6980.261	-4.230	2.350	6112.485	-6.570	-17.580
53.	10713.051	3.200	4.690	6978.221	-5.190	2.810	6104.283	-6.490	-17.600
54.	10724.099	3.550	4.470	6966.174	-6.110	3.270	6086.263	-6.400	-17.600
55.	10736.269	3.860	4.240	6952.213	-7.000	3.710	6076.457	-6.280	-17.500
56.	10749.476	4.170	4.020	6936.405	-7.850	4.150	6064.937	-6.140	-17.500
57.	10763.626	4.440	3.790	6918.863	-8.660	4.570	6053.713	-5.960	-17.430
58.	10778.629	4.660	3.570	6899.660	-9.410	4.970	6042.833	-5.790	-17.330
59.	10794.381	4.860	3.350	6878.970	-10.120	5.350	6032.337	-5.600	-17.200
60.	10810.784	5.060	3.140	6856.847	-10.760	5.710	6022.262	-5.390	-17.030
61.	10827.734	5.200	2.930	6833.430	-11.390	6.050	6012.666	-5.100	-16.800
62.	10845.130	5.310	2.720	6808.836	-11.940	6.360	6003.527	-4.830	-16.620
63.	10862.872	5.390	2.530	6783.195	-12.450	6.640	5994.939	-4.580	-16.370
64.	10880.856	5.440	2.330	6756.622	-12.890	6.890	5985.920	-4.330	-16.100
65.	10898.992	5.460	2.150	6729.241	-13.290	7.110	5976.505	-4.090	-15.780
66.	10917.176	5.450	1.970	6701.173	-13.640	7.300	5972.729	-3.860	-15.400
67.	10935.321	5.420	1.800	6672.537	-13.930	7.450	5966.627	-3.650	-15.070
68.	10953.335	5.360	1.640	6643.450	-14.170	7.560	5961.233	-3.470	-14.680
69.	10971.133	5.270	1.490	6614.026	-14.360	7.640	5956.579	-3.300	-14.230
70.	10988.634	5.160	1.340	6584.375	-14.500	7.680	5952.710	-3.150	-13.760
71.	11005.760	5.030	1.210	6554.606	-14.600	7.680	5948.626	-3.000	-13.200
72.	11022.437	4.880	1.080	6524.820	-14.650	7.640	5947.330	-2.860	-12.630
73.	11038.555	4.710	.960	6495.116	-14.650	7.550	5946.021	-2.710	-12.100
74.	11054.169	4.520	.840	6465.596	-14.600	7.430	5945.548	-2.580	-11.530
75.	11069.098	4.320	.740	6436.343	-14.520	7.260	5945.999	-2.460	-10.970
76.	11083.323	4.100	.640	6407.447	-14.390	7.050	5947.402	-2.350	-10.330
77.	11096.793	3.860	.550	6378.989	-14.220	6.800	5949.780	-2.240	-9.680
78.	11109.457	3.610	.470	6351.046	-14.010	6.500	5953.156	-2.140	-9.040
79.	11121.270	3.350	.390	6323.690	-13.770	6.160	5957.556	-2.040	-8.400
80.	11132.192	3.060	.320	6296.969	-13.460	5.760	5963.000	-1.940	-7.760
81.	11142.185	2.800	.260	6271.005	-13.170	5.360	5969.501	-1.840	-7.120
82.	11151.214	2.510	.200	6245.796	-12.820	4.900	5977.078	-1.740	-6.480
83.	11159.251	2.210	.160	6221.415	-12.440	4.400	5985.743	-1.640	-5.840
84.	11166.269	1.910	.110	6197.910	-12.030	3.870	5995.507	-1.540	-5.200
85.	11172.245	1.600	.080	6175.325	-11.590	3.300	6006.376	-1.440	-4.560
86.	11177.161	1.290	.050	6153.695	-11.130	2.650	6018.360	-1.340	-3.920
87.	11181.000	.970	.030	6133.064	-10.650	2.060	6031.456	-1.240	-3.280
88.	11183.751	.650	.010	6113.452	-10.140	1.400	6045.664	-1.140	-2.640
89.	11185.405	.320	0.000	6094.887	-9.620	.710	6060.978	-1.040	-2.000
90.	11186.957	-0.000	-0.000	6077.390	-9.060	0.000	6077.390	-0.940	-1.360
91.	11188.405	-.320	0.000	6060.976	-8.530	-0.730	6094.887	-0.840	-0.720
92.	11189.751	-.650	.010	6045.664	-7.960	-1.470	6113.452	-0.740	-0.080
93.	11191.000	-.970	.030	6031.456	-7.390	-2.220	6133.064	-0.640	0.560
94.	11192.245	-1.290	.050	6018.360	-6.810	-2.990	6153.695	-0.540	1.320
95.	11193.405	-1.600	.080	6006.376	-6.220	-3.760	6175.325	-0.440	2.080
96.	11194.561	-1.910	.110	5995.507	-5.630	-4.520	6197.910	-0.340	2.840
97.	11195.629	-2.210	.160	5985.743	-5.040	-5.290	6221.415	-0.240	3.600
98.	11196.697	-2.510	.200	5977.078	-4.450	-6.050	6245.746	-0.140	4.360
99.	11197.765	-2.800	.260	5969.501	-3.860	-6.800	6271.005	-0.040	5.120

Y-PLANE (XZ-PLANE) SAPPHIRE

	LPM12	LPM13	FSRVEL	FSPH12	FSPH13	SRVEL	SSPH12	SSPH13
100.	-3.060	.320	5963.000	-3.260	-7.540	6230.989	13.480	5.780
101.	-3.350	.390	5957.558	-2.710	-6.270	6323.690	13.770	6.160
102.	-3.610	.470	5953.158	-2.140	-5.000	6351.046	14.010	6.500
103.	-3.860	.550	5949.780	-1.540	-3.680	6378.369	14.220	6.800
104.	-4.100	.640	5947.402	-1.040	-2.330	6407.447	14.330	7.080
105.	-4.320	.740	5945.999	-.510	-1.030	6436.343	14.520	7.260
106.	-4.520	.840	5945.546	.010	.110	6465.596	14.600	7.430
107.	-4.710	.960	5946.021	.510	.510	6495.118	14.650	7.550
108.	-4.880	1.080	5949.626	1.000	1.000	6524.820	14.680	7.640
109.	-5.030	1.210	5949.626	1.470	1.470	6554.606	14.690	7.680
110.	-5.160	1.340	5952.700	1.920	1.920	6584.375	14.500	7.600
111.	-5.270	1.440	5956.574	2.350	2.350	6614.026	14.360	7.440
112.	-5.360	1.640	5961.233	2.770	2.770	6643.450	14.170	7.200
113.	-5.420	1.800	5966.627	3.160	3.160	6672.537	13.930	6.850
114.	-5.450	1.970	5972.729	3.540	3.540	6701.173	13.640	6.300
115.	-5.460	2.150	5979.505	3.890	3.890	6729.241	13.290	5.600
116.	-5.440	2.330	5986.920	4.230	4.230	6756.622	12.890	4.700
117.	-5.390	2.530	5994.934	4.540	4.540	6783.195	12.450	3.600
118.	-5.310	2.720	6003.527	4.830	4.830	6808.838	11.940	2.300
119.	-5.200	2.930	6012.646	5.100	5.100	6833.430	11.390	8.000
120.	-5.060	3.140	6022.262	5.350	5.350	6856.897	10.760	5.710
121.	-4.960	3.350	6032.337	5.560	5.560	6878.970	10.120	5.350
122.	-4.860	3.570	6042.833	5.750	5.750	6899.693	9.410	4.950
123.	-4.640	3.790	6053.713	5.900	5.900	6918.063	8.660	4.500
124.	-4.410	4.020	6064.937	6.140	6.140	6934.409	7.890	4.150
125.	-4.170	4.240	6076.467	6.260	6.260	6952.213	7.090	3.610
126.	-3.960	4.470	6088.263	6.400	6.400	6969.119	6.110	3.270
127.	-3.760	4.690	6100.283	6.490	6.490	6978.221	5.190	2.690
128.	-3.500	4.910	6112.465	6.570	6.570	6986.261	4.230	2.350
129.	-3.230	5.120	6124.826	6.610	6.610	6992.234	3.240	1.800
130.	-2.910	5.330	6137.261	6.640	6.640	7002.490	2.240	1.420
131.	-2.580	5.520	6149.741	6.640	6.640	7009.787	1.220	9.500
132.	-2.240	5.710	6162.219	6.610	6.610	7007.311	.200	4.400
133.	-1.890	5.890	6174.634	6.550	6.550	7006.656	-.410	4.300
134.	-1.530	6.050	6186.946	6.460	6.460	7003.840	-1.020	4.400
135.	-1.170	6.200	6199.062	6.340	6.340	6998.898	-2.010	4.800
136.	-.800	6.330	6210.976	6.190	6.190	6991.888	-3.760	5.100
137.	-.430	6.450	6222.557	5.990	5.990	6982.890	-4.670	5.100
138.	0.000	6.550	6233.744	5.750	5.750	6972.005	-5.530	5.000
139.	0.360	6.630	6244.444	5.460	5.460	6959.363	-6.330	4.400
140.	0.720	6.690	6254.554	5.120	5.120	6945.116	-7.060	3.630
141.	1.080	6.740	6263.956	4.710	4.710	6929.445	-7.660	3.160
142.	1.440	6.760	6272.514	4.220	4.220	6912.562	-8.210	3.520
143.	1.800	6.770	6280.072	3.650	3.650	6894.707	-8.620	3.600
144.	2.160	6.760	6286.452	2.990	2.990	6876.455	-8.900	4.170
145.	2.520	6.730	6291.450	2.210	2.210	6857.212	-9.030	4.400
146.	2.880	6.690	6294.839	1.310	1.310	6836.217	-9.080	4.700
147.	3.240	6.630	6296.371	.270	.270	6814.534	-8.790	5.000
148.	3.600	6.550	6295.787	-.400	-.400	6801.566	-8.390	5.300
149.	3.960	6.460	6292.832	-2.200	-2.200	6784.655	-7.810	5.650

Y-PLANE (XZ-PLANE) SAPPHIRE

	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
150.	4.970	6.350	6287.276	-3.610	-11.630	6765.154	-7.070	-5.530
151.	5.070	6.240	6278.953	-3.060	-11.360	6755.421	-6.190	-6.600
152.	5.140	6.100	6267.770	-6.560	-10.710	6743.645	-5.820	-6.440
153.	5.190	5.960	6253.743	-8.040	-10.240	6733.951	-4.800	-6.040
154.	5.210	5.810	6236.997	-9.410	-9.730	6726.352	-3.210	-6.630
155.	5.200	5.650	6217.755	-10.640	-9.240	6720.760	-2.260	-6.910
156.	5.170	5.470	6196.317	-11.710	-8.710	6717.011	-1.410	-6.970
157.	5.120	5.290	6173.030	-12.600	-8.340	6714.593	-.670	-6.910
158.	5.040	5.110	6148.266	-13.310	-7.950	6714.174	-.050	-6.910
159.	4.940	4.910	6122.374	-13.640	-7.540	6714.619	.470	-6.610
160.	4.830	4.710	6095.721	-14.200	-7.160	6716.000	.660	-6.060
161.	4.690	4.500	6068.630	-14.416	-6.730	6718.141	1.190	-5.490
162.	4.540	4.290	6041.400	-14.470	-6.450	6720.642	1.430	-5.270
163.	4.370	4.070	6014.305	-14.400	-6.160	6723.956	1.600	-6.030
164.	4.150	3.850	5987.593	-14.200	-5.830	6727.350	1.710	-.570
165.	3.950	3.630	5961.490	-13.690	-5.500	6730.937	1.770	-5.490
166.	3.760	3.400	5936.199	-13.470	-5.170	6734.994	1.790	-5.170
167.	3.560	3.170	5911.905	-12.960	-4.840	6738.252	1.770	-4.800
168.	3.330	2.930	5886.774	-12.350	-4.500	6741.544	1.720	-4.420
169.	3.080	2.690	5860.958	-11.650	-4.150	6745.313	1.650	-4.170
170.	2.830	2.460	5846.595	-10.870	-3.800	6748.612	1.560	-3.810
171.	2.570	2.220	5827.806	-10.020	-3.450	6751.699	1.440	-3.490
172.	2.300	1.970	5810.704	-9.090	-3.060	6754.541	1.320	-3.000
173.	2.030	1.730	5795.385	-8.100	-2.710	6757.109	1.160	-2.740
174.	1.750	1.480	5781.935	-7.050	-2.340	6759.370	1.030	-2.330
175.	1.470	1.240	5770.430	-5.960	-1.960	6761.330	.870	-1.920
176.	1.180	.990	5760.931	-4.820	-1.570	6762.947	.700	-1.500
177.	.850	.740	5753.491	-3.650	-1.160	6764.218	.530	-1.170
178.	.590	.500	5748.147	-2.450	-.750	6765.132	.360	-.910
179.	.300	.250	5744.930	-1.230	-.400	6765.084	.180	-.390
180.	-0.000	-0.000	5743.655	0.000	0.000	6765.660	-0.000	0.000

Z-PLANE (XY-PLANE) SAPPHIRE

	LNQVEL	LPN112	LPN113	FSRVEL	FSPH112	FSPH113	BULK	SSRVEL	SSPH112	SSPH113
0.	11174.720	0.000	0.000	6765.866	0.000	0.000		5743.955	0.000	0.000
1.	11174.769	.030	-.250	6765.266	-.560	.350		5744.443	.670	.000
2.	11174.915	.040	-.500	6763.551	-1.120	.780		5745.205	1.340	.750
3.	11175.156	.060	-.740	6760.665	-1.680	1.170		5743.131	2.000	1.100
4.	11175.490	.110	-.990	6756.441	-2.230	1.560		5753.211	2.650	1.500
5.	11175.913	.140	-1.230	6751.497	-2.770	1.940		5756.425	3.290	1.930
6.	11176.421	.160	-1.460	6745.257	-3.300	2.320		5769.751	3.910	2.320
7.	11177.086	.180	-1.700	6737.947	-3.810	2.650		5772.159	4.510	2.650
8.	11177.664	.200	-1.920	6729.602	-4.310	3.060		5780.615	5.060	3.060
9.	11178.386	.220	-2.140	6720.254	-4.790	3.420		5790.079	5.630	3.300
10.	11179.165	.240	-2.360	6709.965	-5.250	3.770		5800.505	6.140	3.720
11.	11179.991	.260	-2.570	6698.770	-5.680	4.110		5811.000	6.620	4.030
12.	11180.857	.280	-2.770	6686.732	-6.080	4.440		5828.026	7.060	4.300
13.	11181.751	.270	-2.960	6673.916	-6.460	4.760		5835.994	7.460	4.620
14.	11182.664	.270	-3.150	6660.357	-6.790	5.080		5850.671	7.810	4.890
15.	11183.587	.270	-3.320	6646.256	-7.090	5.360		5864.970	8.110	5.100
16.	11184.509	.270	-3.490	6631.586	-7.330	5.670		5879.797	8.350	5.300
17.	11185.419	.260	-3.640	6616.495	-7.530	5.940		5895.065	8.520	5.600
18.	11186.309	.260	-3.790	6601.100	-7.680	6.210		5910.521	8.630	5.800
19.	11187.166	.250	-3.920	6585.553	-7.720	6.460		5926.295	8.650	5.970
20.	11187.987	.230	-4.050	6569.953	-7.700	6.650		5941.999	8.500	6.130
21.	11188.756	.220	-4.160	6554.605	-7.500	6.920		5957.510	8.200	6.200
22.	11189.471	.200	-4.260	6539.611	-7.310	7.120		5972.802	7.800	6.300
23.	11190.115	.160	-4.350	6525.240	-6.990	7.320		5987.127	7.670	6.400
24.	11190.696	.160	-4.430	6497.934	-6.460	7.450		6000.056	7.500	6.540
25.	11191.195	.130	-4.500	6499.515	-5.810	7.680		6013.093	7.320	6.600
26.	11191.610	.110	-4.550	6488.805	-5.060	7.760		6023.527	7.000	6.600
27.	11191.936	.060	-4.600	6479.969	-4.190	7.690		6032.701	6.500	6.600
28.	11192.175	.030	-4.630	6473.399	-3.270	7.970		6039.333	5.900	6.600
29.	11192.316	.030	-4.650	6469.317	-2.400	8.020		6043.441	5.100	6.600
30.	11192.366	.000	-4.650	6467.934	0.000	8.030		6046.632	4.000	6.600
31.	11192.316	-.030	-4.650	6464.317	1.400	8.020		6043.441	2.800	6.600
32.	11192.175	-.060	-4.630	6473.399	2.720	7.970		6039.333	2.000	6.600
33.	11191.936	-.110	-4.600	6479.969	3.920	7.690		6032.701	1.000	6.600
34.	11191.610	-.130	-4.550	6488.805	4.960	7.760		6023.527	0.000	6.600
35.	11191.195	-.160	-4.500	6499.515	5.810	7.680		6013.093	0.000	6.600
36.	11190.696	-.180	-4.430	6511.772	6.480	7.490		6000.698	0.000	6.600
37.	11190.115	-.200	-4.350	6525.240	6.990	7.320		5987.127	0.000	6.600
38.	11189.471	-.220	-4.260	6539.611	7.330	7.120		5972.802	0.000	6.600
39.	11188.756	-.220	-4.160	6554.605	7.580	6.920		5957.510	0.000	6.600
40.	11187.987	-.230	-4.050	6569.953	7.700	6.650		5941.999	0.000	6.600
41.	11187.166	-.250	-3.920	6585.553	7.720	6.460		5926.295	0.000	6.600
42.	11186.309	-.260	-3.790	6601.100	7.680	6.210		5910.521	0.000	6.600
43.	11185.415	-.260	-3.640	6616.499	7.530	5.940		5895.065	0.000	6.600
44.	11184.509	-.270	-3.490	6631.586	7.330	5.670		5879.797	0.000	6.600
45.	11183.587	-.270	-3.320	6646.256	7.090	5.360		5864.970	0.000	6.600
46.	11182.664	-.270	-3.150	6660.357	6.790	5.080		5850.671	0.000	6.600
47.	11181.751	-.260	-2.960	6673.916	6.460	4.760		5835.994	0.000	6.600
48.	11180.857	-.260	-2.770	6686.732	6.080	4.440		5828.026	0.000	6.600
49.	11179.991	-.250	-2.570	6698.770	5.680	4.110		5811.000	0.000	6.600

Z-PLANE (XY-PLANE) SAPPHIRE

	LPM12	LPM13	FSRWEL	FSPH12	FSPH13	SSRWEL	SSPH12	SSPH13
50.	11179.165	-2.360	6709.965	5.250	3.770	5800.505	-0.140	3.720
51.	11178.366	-2.220	6720.259	4.790	3.420	5790.079	-5.630	3.300
52.	11177.664	-2.000	6729.602	4.310	3.060	5780.615	-5.060	3.000
53.	11177.006	-1.920	6737.947	3.610	2.650	5772.159	-4.510	2.690
54.	11176.421	-1.700	6745.257	3.300	2.320	5764.751	-3.910	2.320
55.	11175.913	-1.460	6751.497	2.770	1.940	5758.425	-3.290	1.990
56.	11175.490	-1.230	6756.641	2.230	1.560	5753.211	-2.650	1.590
57.	11175.156	-1.100	6760.865	1.680	1.170	5748.131	-2.000	1.190
58.	11174.915	-0.900	6763.551	1.120	.780	5743.205	-1.340	.790
59.	11174.769	-0.600	6765.286	.560	.390	5744.443	-.670	.400
60.	11174.720	0.000	6765.866	0.000	-.000	5743.055	0.000	-.000
61.	11174.765	.030	6765.266	-.560	-.350	5744.443	.670	-.400
62.	11174.915	.060	6763.551	-1.120	-.780	5746.205	1.340	-.790
63.	11175.156	.080	6760.865	-1.680	-1.170	5748.131	2.000	-1.190
64.	11175.490	.110	6756.641	-2.230	-1.560	5753.211	2.650	-1.590
65.	11175.913	.140	6751.497	-2.770	-1.940	5758.425	3.290	-1.990
66.	11176.421	.160	6745.257	-3.300	-2.320	5764.751	3.910	-2.320
67.	11177.006	.180	6737.947	-3.810	-2.650	5772.159	4.510	-2.690
68.	11177.664	.200	6729.602	-4.310	-3.060	5780.615	5.060	-3.000
69.	11178.366	.220	6720.259	-4.790	-3.420	5790.079	5.630	-3.300
70.	11179.165	.240	6709.965	-5.250	-3.770	5800.505	6.140	-3.720
71.	11179.991	.250	6698.770	-5.680	-4.110	5811.940	6.620	-4.030
72.	11180.857	.260	6686.732	-6.080	-4.440	5824.026	7.080	-4.340
73.	11181.751	.270	6673.916	-6.460	-4.760	5836.994	7.460	-4.620
74.	11182.664	.270	6660.397	-6.790	-5.080	5850.071	7.810	-4.890
75.	11183.567	.270	6646.256	-7.090	-5.380	5864.970	8.110	-5.140
76.	11184.509	.270	6631.566	-7.330	-5.670	5880.797	8.350	-5.360
77.	11185.419	.260	6616.499	-7.530	-5.940	5897.045	8.520	-5.600
78.	11186.309	.260	6601.106	-7.660	-6.210	5913.291	8.630	-5.800
79.	11187.168	.250	6585.553	-7.720	-6.460	5929.295	8.650	-5.970
80.	11187.987	.230	6569.993	-7.760	-6.690	5945.999	8.580	-6.130
81.	11188.756	.220	6554.609	-7.760	-6.920	5962.516	8.400	-6.260
82.	11189.471	.200	6539.611	-7.730	-7.120	5978.042	8.110	-6.360
83.	11190.119	.160	6525.240	-7.690	-7.320	5993.127	7.670	-6.440
84.	11190.696	.160	6511.772	-7.640	-7.490	6008.698	7.080	-6.540
85.	11191.195	.130	6499.515	-7.610	-7.640	6024.043	6.320	-6.600
86.	11191.610	.110	6488.805	-7.560	-7.760	6039.027	5.370	-6.670
87.	11191.938	.080	6479.989	-7.490	-7.850	6053.701	4.240	-6.710
88.	11192.175	.060	6473.399	-7.420	-7.920	6068.043	2.940	-6.760
89.	11192.318	.030	6469.317	-7.350	-8.000	6082.044	1.510	-6.820
90.	11192.366	-.000	6467.934	-.000	-8.030	6095.632	0.000	-6.860
91.	11192.318	-.030	6469.317	1.400	-8.020	6108.441	-1.510	-6.890
92.	11192.175	-.060	6473.399	2.720	-7.970	6120.333	-2.940	-6.880
93.	11191.938	-.080	6479.989	3.920	-7.850	6131.043	-4.240	-6.870
94.	11191.610	-.110	6488.805	4.960	-7.760	6140.627	-5.370	-6.840
95.	11191.195	-.130	6499.515	5.810	-7.640	6149.043	-6.320	-6.800
96.	11190.696	-.160	6511.772	6.460	-7.490	6156.698	-7.080	-6.740
97.	11190.119	-.160	6525.240	6.990	-7.320	6163.127	-7.670	-6.670
98.	11189.471	-.200	6539.611	7.350	-7.120	6168.642	-8.110	-6.540
99.	11188.756	-.220	6554.609	7.560	-6.920	6173.516	-8.400	-6.400

Z-PLANE (XY-PLANE) SAPPHIRE

BULK

	LNGVEL	LPM12	LPM13	FSPVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
100.	11167.507	-230	4.050	6569.993	7.700	-6.650	5941.999	-8.150	-6.130
101.	11187.186	-250	3.920	6545.553	7.720	-6.460	5926.295	-8.150	-5.970
102.	11186.309	-260	3.790	6601.106	7.660	-6.210	5910.591	-8.630	-5.800
103.	11185.419	-260	3.640	6616.495	7.530	-5.540	5895.045	-8.520	-5.600
104.	11184.509	-270	3.490	6631.508	7.330	-5.670	5879.797	-8.350	-5.350
105.	11183.587	-270	3.320	6646.256	7.090	-5.360	5864.597	-8.110	-5.150
106.	11182.664	-270	3.150	6660.397	6.790	-5.140	5849.671	-7.610	-4.850
107.	11181.751	-270	2.960	6673.916	6.460	-4.760	5834.944	-7.460	-4.620
108.	11180.857	-260	2.770	6686.732	6.080	-4.440	5820.026	-7.060	-4.350
109.	11179.991	-250	2.570	6698.770	5.660	-4.110	5805.040	-6.620	-4.030
110.	11179.165	-240	2.360	6709.965	5.250	-3.770	5800.505	-6.140	-3.720
111.	11178.366	-220	2.140	6720.255	4.790	-3.420	5790.079	-5.630	-3.380
112.	11177.664	-200	1.920	6729.602	4.310	-3.060	5780.615	-5.000	-3.000
113.	11177.006	-180	1.700	6737.947	3.810	-2.650	5772.159	-4.510	-2.650
114.	11176.421	-160	1.460	6745.257	3.300	-2.320	5764.751	-3.910	-2.320
115.	11175.913	-140	1.230	6751.497	2.770	-1.940	5756.425	-3.290	-1.950
116.	11175.450	-110	.990	6756.641	2.230	-1.560	5753.211	-2.650	-1.570
117.	11175.156	-080	.740	6760.665	1.680	-1.170	5749.131	-2.000	-1.100
118.	11174.915	-060	.500	6763.551	1.120	-.760	5740.235	-1.340	-.790
119.	11174.769	-030	.250	6765.288	.560	-.390	5744.443	-.670	-.440
120.	11174.720	0.000	-0.000	6765.866	0.000	0.000	5743.055	0.000	0.000
121.	11174.769	.030	-.250	6765.288	-.560	.350	5744.443	.670	.440
122.	11174.915	.060	-.500	6763.551	-1.120	.760	5740.235	1.340	.790
123.	11175.156	.080	-.740	6760.665	-1.680	1.170	5749.131	2.000	1.100
124.	11175.450	.110	-.990	6756.641	-2.230	1.560	5753.211	2.650	1.570
125.	11175.913	.140	-1.230	6751.497	-2.770	1.940	5756.425	3.290	1.950
126.	11176.421	.160	-1.460	6745.257	-3.300	2.320	5764.751	3.910	2.320
127.	11177.006	.180	-1.700	6737.947	-3.810	2.650	5772.159	4.510	2.650
128.	11177.664	.200	-1.920	6729.602	-4.310	3.060	5780.615	5.000	3.000
129.	11178.366	.220	-2.140	6720.255	-4.790	3.420	5790.079	5.630	3.380
130.	11179.165	.240	-2.360	6709.965	-5.250	3.770	5800.505	6.140	3.720
131.	11179.991	.260	-2.570	6698.770	-5.660	4.110	5811.040	6.620	4.030
132.	11180.857	.260	-2.770	6686.732	-6.080	4.440	5820.026	7.060	4.350
133.	11181.751	.270	-2.960	6673.916	-6.460	4.760	5834.944	7.460	4.620
134.	11182.664	.270	-3.150	6660.397	-6.790	5.080	5849.671	7.810	4.850
135.	11183.587	.270	-3.320	6646.256	-7.090	5.380	5864.597	8.110	5.150
136.	11184.509	.270	-3.490	6631.508	-7.330	5.670	5879.797	8.350	5.350
137.	11185.419	.260	-3.640	6616.495	-7.530	5.940	5895.045	8.520	5.600
138.	11186.309	.260	-3.790	6601.106	-7.660	6.210	5910.591	8.630	5.800
139.	11187.186	.250	-3.920	6585.553	-7.720	6.460	5926.295	8.650	5.970
140.	11187.987	.230	-4.050	6569.993	-7.700	6.650	5941.999	8.580	6.130
141.	11188.758	.200	-4.160	6554.609	-7.580	6.920	5957.516	8.400	6.260
142.	11189.471	.180	-4.260	6539.611	-7.350	7.120	5972.642	8.110	6.360
143.	11190.119	.160	-4.350	6525.240	-6.990	7.320	5987.127	7.670	6.450
144.	11190.696	.140	-4.430	6511.772	-6.460	7.450	6000.696	7.060	6.540
145.	11191.195	.130	-4.500	6499.515	-5.810	7.640	6013.043	6.320	6.640
146.	11191.610	.110	-4.550	6488.805	-4.960	7.760	6023.827	5.370	6.670
147.	11191.938	.080	-4.600	6479.969	-3.920	7.690	6032.701	4.240	6.650
148.	11192.175	.060	-4.630	6473.399	-2.720	7.570	6039.333	2.940	6.600
149.	11192.310	.030	-4.650	6469.317	-1.400	8.020	6043.441	1.510	6.690

Z-PLANE (XY-PLANE) SAPPHIRE

	LNGLVL	LPH12	LPH13	FSRVEL	FSPH12	FSPH13	BULK	SSRVEL	SSPH12	SSPH13
150.	11192.366	-0.000	-4.650	6467.934	0.000	6.030	6044.632	6044.632	-0.000	0.000
151.	11192.316	-0.030	-4.650	6469.317	1.400	6.020	6043.441	6043.441	-1.510	0.000
152.	11192.175	-0.060	-4.630	6473.339	2.720	7.570	6033.333	6033.333	-2.540	0.000
153.	11191.938	-0.080	-4.600	6479.969	3.920	7.650	6032.701	6032.701	-4.240	0.000
154.	11191.610	-0.110	-4.550	6488.805	4.960	7.600	6023.627	6023.627	-5.370	0.000
155.	11191.195	-0.130	-4.500	6499.515	5.810	7.640	6013.043	6013.043	-6.320	0.000
156.	11190.119	-0.160	-4.350	6525.240	6.990	7.320	5987.127	5987.127	-7.670	0.000
157.	11190.696	-0.160	-4.430	6511.772	6.460	7.450	6000.598	6000.598	-7.660	0.000
158.	11189.471	-0.200	-4.260	6539.611	7.350	7.120	5972.042	5972.042	-8.110	0.000
159.	11188.758	-0.220	-4.160	6554.609	7.560	6.920	5957.516	5957.516	-8.400	0.000
160.	11187.967	-0.230	-4.050	6569.993	7.700	6.650	5941.395	5941.395	-8.260	0.000
161.	11187.168	-0.250	-3.920	6585.553	7.720	6.460	5920.295	5920.295	-8.650	0.000
162.	11186.309	-0.260	-3.740	6601.120	7.660	6.210	5910.591	5910.591	-8.630	0.000
163.	11185.419	-0.260	-3.640	6616.499	7.530	5.940	5892.345	5892.345	-8.520	0.000
164.	11184.509	-0.270	-3.490	6631.566	7.330	5.670	5879.797	5879.797	-8.350	0.000
165.	11183.587	-0.270	-3.320	6646.256	7.030	5.360	5864.370	5864.370	-8.110	0.000
166.	11182.664	-0.270	-3.150	6660.397	6.730	5.060	5850.671	5850.671	-7.810	0.000
167.	11181.751	-0.270	-2.960	6673.916	6.460	4.760	5836.934	5836.934	-7.460	0.000
168.	11180.857	-0.260	-2.770	6686.732	6.000	4.440	5824.026	5824.026	-7.060	0.000
169.	11179.991	-0.250	-2.570	6698.770	5.600	4.110	5811.840	5811.840	-6.620	0.000
170.	11179.165	-0.240	-2.360	6709.965	5.250	3.770	5800.505	5800.505	-6.140	0.000
171.	11178.366	-0.220	-2.140	6720.259	4.790	3.420	5790.079	5790.079	-5.630	0.000
172.	11177.664	-0.200	-1.920	6729.602	4.310	3.060	5780.615	5780.615	-5.060	0.000
173.	11177.006	-0.160	-1.700	6737.947	3.810	2.690	5772.159	5772.159	-4.510	0.000
174.	11176.421	-0.160	-1.460	6745.257	3.300	2.320	5764.751	5764.751	-3.910	0.000
175.	11175.913	-0.140	-1.230	6751.497	2.770	1.940	5758.425	5758.425	-3.290	0.000
176.	11175.490	-0.110	-0.990	6756.641	2.230	1.560	5753.211	5753.211	-2.650	0.000
177.	11175.156	-0.060	-0.740	6760.665	1.660	1.170	5749.131	5749.131	-2.000	0.000
178.	11174.915	-0.060	-0.500	6763.551	1.120	.760	5746.205	5746.205	-1.340	0.000
179.	11174.769	-0.030	-0.250	6765.288	.560	.390	5744.443	5744.443	-0.670	0.000
180.	11174.720	0.000	0.000	6765.868	-0.000	-0.160	5743.855	5743.855	0.000	-0.000

Z-PLANE (XY-PLANE) SILICON

	LNGVEL	LPMI12	LPMI13	FSRVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13
0.	8440.654	0.000	0.000	5844.920	0.000	0.000	5844.920	0.000	0.000
1.	8441.825	.910	0.000	5843.222	-1.910	0.000	5844.920	0.600	0.000
2.	8445.341	1.810	0.000	5838.145	-3.790	0.000	5844.920	0.000	0.000
3.	8451.148	2.690	0.000	5829.736	-5.640	0.000	5844.920	0.000	0.000
4.	8459.181	3.530	0.000	5818.073	-7.440	0.000	5844.920	-0.000	0.000
5.	8469.346	4.330	0.000	5803.264	-9.160	0.000	5844.920	0.000	0.000
6.	8481.534	5.060	0.000	5785.436	-10.810	0.000	5844.920	0.000	0.000
7.	8495.609	5.770	0.000	5764.750	-12.370	0.000	5844.920	0.600	0.000
8.	8511.427	6.390	0.000	5741.370	-13.830	0.000	5844.920	-0.000	0.000
9.	8528.832	6.950	0.000	5715.464	-15.190	0.000	5844.920	0.000	0.000
10.	8547.661	7.440	0.000	5687.286	-16.440	0.000	5844.920	0.000	0.000
11.	8567.748	7.870	0.000	5656.980	-17.580	0.000	5844.920	0.000	0.000
12.	8588.926	8.220	0.000	5624.774	-18.620	0.000	5844.920	-0.000	0.000
13.	8611.028	8.520	0.000	5590.876	-19.560	0.000	5844.920	0.000	0.000
14.	8633.893	8.750	0.000	5555.503	-20.390	0.000	5844.920	-0.600	0.000
15.	8657.363	8.920	0.000	5518.858	-21.120	0.000	5844.920	0.000	0.000
16.	8681.287	9.040	0.000	5481.146	-21.750	0.000	5844.920	-0.000	0.000
17.	8705.520	9.100	0.000	5442.576	-22.290	0.000	5844.920	0.000	0.000
18.	8729.925	9.120	0.000	5403.345	-22.730	0.000	5844.920	-0.600	0.000
19.	8754.373	9.080	0.000	5363.644	-23.070	0.000	5844.920	0.000	0.000
20.	8778.742	9.010	0.000	5323.665	-23.320	0.000	5844.920	-0.600	0.000
21.	8802.919	8.890	0.000	5283.592	-23.480	0.000	5844.920	0.000	0.000
22.	8826.756	8.740	0.000	5243.606	-23.550	0.000	5844.920	0.000	0.000
23.	8850.275	8.560	0.000	5203.680	-23.520	0.000	5844.920	0.000	0.000
24.	8873.263	8.340	0.000	5164.584	-23.410	0.000	5844.920	0.000	0.000
25.	8895.675	8.100	0.000	5125.884	-23.260	0.000	5844.920	0.000	0.000
26.	8917.432	7.830	0.000	5087.940	-22.990	0.000	5844.920	0.000	0.000
27.	8938.461	7.540	0.000	5050.905	-22.510	0.000	5844.920	0.000	0.000
28.	8958.694	7.220	0.000	5014.930	-22.020	0.000	5844.920	0.000	0.000
29.	8978.070	6.890	0.000	4980.159	-21.430	0.000	5844.920	0.000	0.000
30.	8996.531	6.530	0.000	4946.731	-20.750	0.000	5844.920	0.000	0.000
31.	9014.026	6.170	0.000	4914.780	-19.970	0.000	5844.920	0.000	0.000
32.	9030.506	5.780	0.000	4884.433	-19.090	0.000	5844.920	0.000	0.000
33.	9045.928	5.360	0.000	4855.812	-18.110	0.000	5844.920	0.000	0.000
34.	9060.254	4.970	0.000	4829.030	-17.040	0.000	5844.920	0.000	0.000
35.	9073.446	4.550	0.000	4804.196	-15.860	0.000	5844.920	0.000	0.000
36.	9085.475	4.130	0.000	4781.409	-14.600	0.000	5844.920	0.000	0.000
37.	9096.311	3.690	0.000	4760.762	-13.240	0.000	5844.920	0.000	0.000
38.	9105.929	3.240	0.000	4742.340	-11.800	0.000	5844.920	0.000	0.000
39.	9114.307	2.750	0.000	4726.217	-10.270	0.000	5844.920	0.000	0.000
40.	9121.428	2.330	0.000	4712.460	-8.660	0.000	5844.920	0.000	0.000
41.	9127.275	1.870	0.000	4701.125	-7.020	0.000	5844.920	0.000	0.000
42.	9131.836	1.410	0.000	4692.260	-5.310	0.000	5844.920	0.000	0.000
43.	9135.180	.940	0.000	4685.901	-3.570	0.000	5844.920	0.000	0.000
44.	9137.062	.470	0.000	4682.075	-1.790	0.000	5844.920	0.000	0.000
45.	9137.716	0.000	0.000	4680.798	0.000	0.000	5844.920	0.000	0.000
46.	9137.062	-.470	0.000	4682.075	1.790	0.000	5844.920	0.000	0.000
47.	9135.100	-.940	0.000	4685.901	3.570	0.000	5844.920	0.000	0.000
48.	9131.836	-1.410	0.000	4692.260	5.310	0.000	5844.920	0.000	0.000
49.	9127.275	-1.870	0.000	4701.125	7.020	0.000	5844.920	0.000	0.000

BULK

Z-PLANE (XY-PLANE) SILICON

BULK

	LMGVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
50.	9121.428	-2.330	0.000	4712.460	8.660	0.000	5044.920	-0.000	0.000
51.	9114.387	-2.790	0.000	4726.217	10.270	0.000	5044.920	-0.000	0.000
52.	9105.929	-3.240	0.000	4742.340	11.600	0.000	5044.920	-0.000	0.000
53.	9096.311	-3.690	0.000	4760.762	13.240	0.000	5044.920	0.000	0.000
54.	9085.475	-4.130	0.000	4781.409	14.600	0.000	5044.920	0.000	0.000
55.	9073.446	-4.550	0.000	4804.146	15.860	0.000	5044.920	-0.000	0.000
56.	9060.254	-4.970	0.000	4828.030	17.040	0.000	5044.920	-0.000	0.000
57.	9045.928	-5.360	0.000	4853.812	18.110	0.000	5044.920	-0.000	0.000
58.	9030.506	-5.760	0.000	4884.433	19.050	0.000	5044.920	-0.000	0.000
59.	9014.026	-6.170	0.000	4914.780	19.970	0.000	5044.920	-0.000	0.000
60.	8996.531	-6.530	0.000	4946.731	20.750	0.000	5044.920	-0.000	0.000
61.	8976.070	-6.850	0.000	4980.154	21.430	0.000	5044.920	0.000	0.000
62.	8954.694	-7.220	0.000	5014.930	22.020	0.000	5044.920	0.000	0.000
63.	8938.461	-7.540	0.000	5050.905	22.510	0.000	5044.920	0.000	0.000
64.	8917.432	-7.830	0.000	5087.940	22.980	0.000	5044.920	0.000	0.000
65.	8895.675	-8.100	0.000	5125.864	23.200	0.000	5044.920	0.000	0.000
66.	8873.263	-8.340	0.000	5164.584	23.410	0.000	5044.920	0.000	0.000
67.	8850.275	-8.560	0.000	5203.080	23.520	0.000	5044.920	0.000	0.000
68.	8826.796	-8.740	0.000	5243.606	23.550	0.000	5044.920	0.000	0.000
69.	8802.919	-8.890	0.000	5284.592	23.480	0.000	5044.920	0.000	0.000
70.	8778.742	-9.010	0.000	5323.665	23.320	0.000	5044.920	-0.000	0.000
71.	8754.373	-9.120	0.000	5363.644	23.070	0.000	5044.920	-0.000	0.000
72.	8729.925	-9.200	0.000	5403.345	22.730	0.000	5044.920	-0.000	0.000
73.	8705.520	-9.160	0.000	5442.578	22.290	0.000	5044.920	-0.000	0.000
74.	8681.267	-9.040	0.000	5481.146	21.750	0.000	5044.920	0.000	0.000
75.	8657.363	-8.920	0.000	5518.856	21.120	0.000	5044.920	0.000	0.000
76.	8633.893	-8.750	0.000	5555.503	20.390	0.000	5044.920	0.000	0.000
77.	8611.028	-8.520	0.000	5590.878	19.560	0.000	5044.920	-0.000	0.000
78.	8588.926	-8.220	0.000	5624.774	18.620	0.000	5044.920	-0.000	0.000
79.	8567.746	-7.870	0.000	5656.980	17.580	0.000	5044.920	0.000	0.000
80.	8547.661	-7.440	0.000	5687.286	16.440	0.000	5044.920	0.000	0.000
81.	8526.632	-6.950	0.000	5715.484	15.190	0.000	5044.920	0.000	0.000
82.	8511.427	-6.350	0.000	5741.370	13.650	0.000	5044.920	-0.000	0.000
83.	8495.609	-5.770	0.000	5764.750	12.370	0.000	5044.920	-0.000	0.000
84.	8481.534	-5.060	0.000	5785.436	10.610	0.000	5044.920	0.000	0.000
85.	8469.346	-4.330	0.000	5803.264	9.160	0.000	5044.920	0.000	0.000
86.	8459.181	-3.530	0.000	5818.073	7.440	0.000	5044.920	0.000	0.000
87.	8451.146	-2.690	0.000	5829.736	5.640	0.000	5044.920	-0.000	0.000
88.	8445.341	-1.810	0.000	5836.165	3.790	0.000	5044.920	-0.000	0.000
89.	8441.829	-0.910	0.000	5843.222	1.910	0.000	5044.920	-0.000	0.000
90.	8440.654	0.000	0.000	5844.920	-0.000	0.000	5044.920	0.000	0.000
91.	8441.829	0.910	0.000	5843.222	-1.910	0.000	5044.920	0.000	0.000
92.	8445.341	1.810	0.000	5836.165	-3.790	0.000	5044.920	0.000	0.000
93.	8451.146	2.690	0.000	5829.736	-5.640	0.000	5044.920	0.000	0.000
94.	8459.181	3.530	0.000	5818.073	-7.440	0.000	5044.920	-0.000	0.000
95.	8469.346	4.330	0.000	5803.264	-9.160	0.000	5044.920	0.000	0.000
96.	8481.534	5.060	0.000	5785.436	-10.610	0.000	5044.920	0.000	0.000
97.	8495.609	5.770	0.000	5764.750	-12.370	0.000	5044.920	0.000	0.000
98.	8511.427	6.350	0.000	5741.370	-13.650	0.000	5044.920	0.000	0.000
99.	8526.632	6.950	0.000	5715.484	-15.190	0.000	5044.920	0.000	0.000

Z-PLANE (XY-PLANE) SILICON

BULK

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
100.	8547.661	7.440	0.000	5607.266	-16.440	0.000	5044.520	0.000	0.000
101.	8566.740	7.870	0.000	5656.980	-17.560	0.000	5044.520	-0.000	0.000
102.	8566.920	8.220	0.000	5624.774	-18.620	0.000	5044.520	0.000	0.000
103.	8611.028	8.520	0.000	5590.878	-19.560	0.000	5044.520	0.000	0.000
104.	8633.893	8.750	0.000	5555.503	-20.350	0.000	5044.520	0.000	0.000
105.	8657.363	8.920	0.000	5518.858	-21.120	0.000	5044.520	0.000	0.000
106.	8661.287	9.040	0.000	5481.146	-21.750	0.000	5044.520	0.000	0.000
107.	8705.520	9.100	0.000	5442.578	-22.290	0.000	5044.520	0.000	0.000
108.	8729.925	9.120	0.000	5403.345	-22.730	0.000	5044.520	0.000	0.000
109.	8754.373	9.060	0.000	5363.644	-23.070	0.000	5044.520	-0.000	0.000
110.	8776.742	9.010	0.000	5323.665	-23.320	0.000	5044.520	0.000	0.000
111.	8802.919	8.950	0.000	5283.542	-23.460	0.000	5044.520	0.000	0.000
112.	8826.796	8.900	0.000	5243.546	-23.560	0.000	5044.520	0.000	0.000
113.	8850.275	8.560	0.000	5203.880	-23.520	0.000	5044.520	0.000	0.000
114.	8873.263	8.340	0.000	5164.564	-23.410	0.000	5044.520	0.000	0.000
115.	8895.675	8.160	0.000	5125.884	-23.200	0.000	5044.520	0.000	0.000
116.	8917.432	7.830	0.000	5087.940	-22.900	0.000	5044.520	-0.000	0.000
117.	8938.461	7.540	0.000	5050.905	-22.510	0.000	5044.520	0.000	0.000
118.	8958.694	7.220	0.000	5014.930	-22.020	0.000	5044.520	0.000	0.000
119.	8978.070	6.550	0.000	4980.159	-21.430	0.000	5044.520	0.000	0.000
120.	8996.531	6.530	0.000	4946.731	-20.750	0.000	5044.520	0.000	0.000
121.	9014.026	6.170	0.000	4914.780	-19.970	0.000	5044.520	0.000	0.000
122.	9030.506	5.760	0.000	4884.433	-19.090	0.000	5044.520	0.000	0.000
123.	9047.520	5.360	0.000	4855.812	-18.110	0.000	5044.520	0.000	0.000
124.	9060.254	4.970	0.000	4829.030	-17.040	0.000	5044.520	0.000	0.000
125.	9073.446	4.520	0.000	4804.196	-15.860	0.000	5044.520	0.000	0.000
126.	9085.475	4.130	0.000	4781.409	-14.600	0.000	5044.520	0.000	0.000
127.	9096.311	3.690	0.000	4760.762	-13.240	0.000	5044.520	0.000	0.000
128.	9105.929	3.240	0.000	4742.340	-11.600	0.000	5044.520	-0.000	0.000
129.	9114.307	2.790	0.000	4726.217	-10.270	0.000	5044.520	0.000	0.000
130.	9121.426	2.330	0.000	4712.460	-8.660	0.000	5044.520	0.000	0.000
131.	9127.275	1.670	0.000	4701.125	-7.020	0.000	5044.520	0.000	0.000
132.	9131.836	1.410	0.000	4692.260	-5.310	0.000	5044.520	0.000	0.000
133.	9135.100	.940	0.000	4685.901	-3.570	0.000	5044.520	0.000	0.000
134.	9137.062	.470	0.000	4682.875	-1.790	0.000	5044.520	0.000	0.000
135.	9137.716	-0.000	0.000	4680.756	0.000	0.000	5044.520	-0.000	0.000
136.	9137.062	-0.470	0.000	4682.875	1.790	0.000	5044.520	0.000	0.000
137.	9135.100	-0.940	0.000	4685.901	3.570	0.000	5044.520	-0.000	0.000
138.	9131.836	-1.410	0.000	4692.260	5.310	0.000	5044.520	0.000	0.000
139.	9127.275	-1.670	0.000	4701.125	7.020	0.000	5044.520	0.000	0.000
140.	9121.426	-2.330	0.000	4712.460	8.660	0.000	5044.520	0.000	0.000
141.	9114.307	-3.240	0.000	4726.217	10.270	0.000	5044.520	0.000	0.000
142.	9105.929	-4.130	0.000	4742.340	11.600	0.000	5044.520	-0.000	0.000
143.	9096.311	-5.360	0.000	4760.762	13.240	0.000	5044.520	0.000	0.000
144.	9085.475	-6.590	0.000	4781.409	14.600	0.000	5044.520	0.000	0.000
145.	9073.446	-7.830	0.000	4804.196	15.860	0.000	5044.520	0.000	0.000
146.	9060.254	-9.060	0.000	4829.030	17.040	0.000	5044.520	-0.000	0.000
147.	9045.920	-10.270	0.000	4855.812	18.110	0.000	5044.520	0.000	0.000
148.	9030.506	-11.600	0.000	4884.433	19.090	0.000	5044.520	-0.000	0.000
149.	9014.026	-13.240	0.000	4914.780	19.970	0.000	5044.520	0.000	0.000

	Z-PLANE (XY-PLANE) SILICON				BULK			
	LNQVEL	LPN12	LPN13	FSRVEL	FSPN12	FSPN13	SSRVEL	SSPN12
150.	8996.531	-6.530	0.000	4946.731	20.750	0.000	5044.920	0.000
151.	8978.070	-6.890	0.000	4980.159	21.430	0.000	5044.920	0.000
152.	8956.694	-7.220	0.000	5014.930	22.020	0.000	5044.920	0.000
153.	8936.461	-7.540	0.000	5050.905	22.510	0.000	5044.920	0.000
154.	8917.432	-7.830	0.000	5087.940	22.900	0.000	5044.920	0.000
155.	8895.675	-8.110	0.000	5125.884	23.200	0.000	5044.920	0.000
156.	8873.263	-8.340	0.000	5164.584	23.410	0.000	5044.920	0.000
157.	8850.275	-8.560	0.000	5203.880	23.520	0.000	5044.920	0.000
158.	8826.796	-8.740	0.000	5243.606	23.550	0.000	5044.920	0.000
159.	8802.915	-8.890	0.000	5283.592	23.480	0.000	5044.920	0.000
160.	8778.742	-9.010	0.000	5323.605	23.320	0.000	5044.920	0.000
161.	8754.373	-9.080	0.000	5363.644	23.070	0.000	5044.920	0.000
162.	8729.925	-9.120	0.000	5403.345	22.730	0.000	5044.920	0.000
163.	8705.520	-9.100	0.000	5442.576	22.290	0.000	5044.920	0.000
164.	8681.287	-9.040	0.000	5481.148	21.750	0.000	5044.920	0.000
165.	8657.363	-8.920	0.000	5518.850	21.120	0.000	5044.920	0.000
166.	8633.693	-8.750	0.000	5555.503	20.350	0.000	5044.920	0.000
167.	8611.028	-8.520	0.000	5590.876	19.560	0.000	5044.920	0.000
168.	8588.926	-8.220	0.000	5624.774	18.620	0.000	5044.920	0.000
169.	8567.746	-7.870	0.000	5656.980	17.560	0.000	5044.920	0.000
170.	8547.661	-7.440	0.000	5687.261	16.440	0.000	5044.920	0.000
171.	8528.632	-6.950	0.000	5715.484	15.190	0.000	5044.920	0.000
172.	8511.427	-6.350	0.000	5741.370	13.830	0.000	5044.920	0.000
173.	8495.609	-5.770	0.000	5764.750	12.370	0.000	5044.920	0.000
174.	8481.534	-5.060	0.000	5785.436	10.810	0.000	5044.920	0.000
175.	8469.346	-4.330	0.000	5803.264	9.160	0.000	5044.920	0.000
176.	8459.181	-3.530	0.000	5814.073	7.440	0.000	5044.920	0.000
177.	8451.146	-2.690	0.000	5829.736	5.640	0.000	5044.920	0.000
178.	8445.341	-1.810	0.000	5838.145	3.790	0.000	5044.920	0.000
179.	8441.825	-0.910	0.000	5843.222	1.910	0.000	5044.920	0.000
180.	8440.654	0.000	0.000	5844.920	-0.000	0.000	5044.920	0.000

111-PLANE SILICON

	LNQVEL	LP112	LP113	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	9137.716	-0.000	0.000	5844.920	-0.000	0.000	4680.796	0.000	-0.000
1.	9137.804	.060	.380	5844.225	-0.760	-0.550	4681.490	.570	-0.500
2.	9138.067	.130	.770	5842.158	-1.950	-1.100	4683.561	1.530	-1.100
3.	9138.501	.190	1.130	5838.717	-3.320	-1.640	4687.003	2.890	-1.730
4.	9139.102	.250	1.490	5833.920	-4.070	-2.180	4691.002	3.420	-2.300
5.	9139.463	.300	1.860	5827.769	-4.820	-2.710	4697.436	4.740	-2.600
6.	9140.774	.350	2.220	5820.349	-5.550	-3.240	4705.379	5.620	-3.400
7.	9141.826	.400	2.570	5811.636	-6.260	-3.760	4714.099	6.460	-3.900
8.	9143.006	.450	2.910	5801.686	-6.950	-4.260	4724.355	7.380	-4.400
9.	9144.300	.460	3.240	5790.547	-7.610	-4.760	4735.203	8.060	-4.900
10.	9145.694	.520	3.560	5778.271	-8.250	-5.240	4747.431	8.610	-5.400
11.	9147.172	.540	3.870	5764.917	-8.850	-5.710	4760.060	9.400	-5.900
12.	9148.716	.560	4.170	5750.551	-9.410	-6.160	4775.293	10.110	-6.300
13.	9150.313	.560	4.460	5735.245	-9.940	-6.600	4790.585	10.660	-6.750
14.	9151.940	.550	4.730	5719.094	-10.410	-7.020	4806.742	11.160	-7.100
15.	9153.582	.550	4.980	5702.180	-10.840	-7.430	4823.681	11.600	-7.510
16.	9155.220	.560	5.230	5684.612	-11.200	-7.810	4841.275	11.900	-7.800
17.	9156.836	.570	5.450	5666.511	-11.500	-8.150	4854.405	12.210	-8.100
18.	9158.413	.560	5.660	5648.011	-11.710	-8.530	4877.936	12.300	-8.400
19.	9159.934	.530	5.860	5629.266	-11.840	-8.860	4896.710	12.430	-8.710
20.	9161.362	.500	6.040	5610.461	-11.890	-9.170	4915.549	12.360	-8.900
21.	9162.743	.470	6.200	5591.798	-11.740	-9.450	4934.243	12.150	-9.100
22.	9164.001	.430	6.350	5573.525	-11.460	-9.720	4952.547	11.770	-9.310
23.	9165.144	.390	6.480	5555.926	-11.030	-9.960	4970.175	11.200	-9.400
24.	9166.160	.340	6.590	5539.336	-9.370	-10.150	4986.731	10.610	-9.500
25.	9167.036	.290	6.660	5524.139	-8.470	-10.380	5002.011	9.350	-9.600
26.	9167.765	.230	6.760	5510.769	-7.290	-10.550	5015.491	6.610	-9.730
27.	9168.345	.180	6.820	5499.680	-5.820	-10.680	5028.499	6.370	-9.770
28.	9168.761	.120	6.870	5491.393	-4.070	-10.750	5034.846	4.400	-9.800
29.	9169.013	.060	6.900	5484.166	-2.100	-10.850	5040.800	2.290	-9.820
30.	9169.097	-0.000	6.900	5484.404	0.000	-10.870	5041.805	0.000	-9.820
31.	9169.013	-.060	6.890	5480.166	2.100	-10.650	5040.800	-2.290	-9.820
32.	9168.761	-.120	6.870	5491.393	4.070	-10.750	5034.846	-4.400	-9.800
33.	9168.345	-.180	6.820	5499.680	5.820	-10.680	5028.499	-6.370	-9.770
34.	9167.765	-.230	6.760	5510.769	7.290	-10.550	5015.491	-8.610	-9.500
35.	9167.036	-.290	6.660	5524.139	8.470	-10.380	5002.011	-9.350	-9.560
36.	9166.160	-.340	6.590	5539.336	9.370	-10.150	4986.731	-10.610	-9.500
37.	9165.144	-.390	6.480	5555.926	10.030	-9.960	4970.175	-11.200	-9.400
38.	9164.001	-.430	6.350	5573.525	10.460	-9.720	4952.547	-11.770	-9.310
39.	9162.743	-.470	6.200	5591.796	10.740	-9.450	4934.243	-12.150	-9.100
40.	9161.362	-.500	6.040	5610.461	10.850	-9.170	4915.549	-12.360	-8.900
41.	9159.934	-.530	5.860	5629.266	10.840	-8.860	4896.710	-12.430	-8.710
42.	9158.413	-.560	5.660	5648.011	10.710	-8.530	4877.936	-12.300	-8.400
43.	9156.836	-.570	5.450	5666.511	10.500	-8.150	4854.406	-12.210	-8.100
44.	9155.220	-.580	5.230	5684.612	10.200	-7.810	4823.681	-11.550	-7.510
45.	9153.582	-.590	4.980	5702.180	9.640	-7.430	4806.742	-11.160	-7.100
46.	9151.940	-.590	4.730	5719.094	9.410	-7.020	4790.585	-10.660	-6.750
47.	9150.313	-.560	4.460	5735.245	8.940	-6.600	4775.293	-10.110	-6.300
48.	9148.716	-.560	4.170	5750.551	8.410	-6.160	4760.060	-9.400	-5.900
49.	9147.172	-.540	3.870	5764.917	7.650	-5.710	4747.431	-8.610	-5.400

111-PLANE SILICON

BULK

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
50.	9145.694	-520	3.560	5778.271	7.1250	-5.240	4747.491	-6.610	-5.440
51.	9144.380	-460	3.240	5790.547	6.610	-4.760	4735.203	-8.080	-7.920
52.	9143.006	-450	2.910	5801.686	5.950	-4.260	4724.055	-7.300	-7.400
53.	9141.826	-400	2.570	5811.636	5.260	-3.760	4714.099	-6.460	-3.500
54.	9140.774	-350	2.220	5820.349	4.550	-3.240	4705.379	-5.620	-3.400
55.	9139.063	-300	1.860	5827.789	3.820	-2.710	4697.536	-4.740	-2.800
56.	9138.182	-250	1.490	5833.920	3.070	-2.160	4691.602	-3.820	-2.300
57.	9136.501	-190	1.130	5838.717	2.320	-1.640	4687.003	-2.690	-1.730
58.	9135.067	-130	.750	5842.156	1.550	-1.100	4683.561	-1.930	-1.100
59.	9137.804	-60	.380	5844.225	.760	-.550	4681.498	-.570	-.500
60.	9137.715	0.000	0.000	5844.920	-0.000	0.000	4681.490	.570	.500
61.	9137.804	0.000	-.380	5844.229	-1.550	1.100	4683.561	1.930	1.100
62.	9138.067	130	-.750	5842.156	-2.320	1.640	4687.003	2.690	1.730
63.	9138.501	250	-1.130	5838.717	-3.070	2.160	4691.602	3.820	2.300
64.	9138.182	350	-1.490	5833.920	-3.820	2.710	4697.536	4.740	2.800
65.	9139.863	400	-1.860	5827.789	-4.550	3.240	4705.379	5.620	3.400
66.	9140.774	450	-2.220	5820.349	-5.260	3.760	4714.099	6.460	3.500
67.	9141.826	500	-2.570	5811.636	-5.950	4.260	4724.055	7.300	3.700
68.	9143.006	550	-2.910	5801.686	-6.610	4.760	4735.203	8.080	4.000
69.	9144.380	600	-3.240	5790.547	-7.1250	5.240	4747.491	8.610	4.300
70.	9145.694	650	-3.560	5778.271	-7.650	5.710	4760.560	9.490	4.500
71.	9147.172	700	-4.170	5764.917	-8.410	6.160	4775.243	10.110	4.800
72.	9148.716	750	-4.460	5750.551	-8.940	6.600	4790.504	10.680	5.100
73.	9150.313	800	-4.730	5735.249	-9.410	7.020	4806.742	11.100	5.400
74.	9151.941	850	-5.000	5719.094	-9.840	7.430	4823.601	11.600	5.700
75.	9153.582	900	-5.230	5702.180	-10.200	7.810	4841.275	11.920	6.000
76.	9155.228	950	-5.450	5684.612	-10.500	8.180	4859.405	12.210	6.300
77.	9156.836	1000	-5.660	5666.511	-10.770	8.530	4877.936	12.430	6.500
78.	9158.413	1050	-5.860	5648.011	-11.040	8.870	4896.710	12.600	6.700
79.	9159.934	1100	-6.040	5629.266	-11.260	9.170	4915.549	12.740	6.900
80.	9161.382	1150	-6.200	5610.460	-11.480	9.450	4934.243	12.850	7.100
81.	9162.743	1200	-6.350	5591.798	-11.650	9.720	4952.547	12.930	7.300
82.	9164.001	1250	-6.460	5573.524	-11.770	9.960	4970.175	13.000	7.500
83.	9165.144	1300	-6.590	5555.925	-11.840	10.150	4987.741	13.050	7.700
84.	9166.180	1350	-6.680	5539.335	-11.890	10.350	5005.401	13.080	7.900
85.	9167.038	1400	-6.760	5524.139	-11.920	10.550	5023.499	13.100	8.100
86.	9167.769	1450	-6.820	5510.769	-11.940	10.750	5041.805	13.110	8.300
87.	9168.346	1500	-6.870	5499.686	-11.950	10.950	5060.404	13.120	8.500
88.	9168.762	1550	-6.900	5491.353	-11.960	11.150	5079.404	13.120	8.700
89.	9169.013	1600	-6.920	5486.166	-11.960	11.350	5098.791	13.120	8.900
90.	9169.097	1650	-6.930	5484.404	-11.960	11.550	5118.540	13.120	9.100
91.	9169.013	1700	-6.930	5484.404	-11.960	11.750	5138.645	13.120	9.300
92.	9168.762	1750	-6.920	5486.166	-11.950	11.950	5159.001	13.110	9.500
93.	9168.346	1800	-6.890	5491.353	-11.920	12.150	5179.606	13.080	9.700
94.	9167.769	1850	-6.820	5499.686	-11.890	12.350	5200.401	13.030	9.900
95.	9167.038	1900	-6.760	5510.769	-11.840	12.550	5221.499	12.970	10.100
96.	9166.180	1950	-6.680	5524.139	-11.770	12.750	5242.845	12.900	10.300
97.	9165.144	2000	-6.590	5539.335	-11.650	12.930	5264.401	12.810	10.500
98.	9164.001	2050	-6.460	5555.925	-11.480	13.100	5286.175	12.710	10.700
99.	9162.743	2100	-6.350	5573.524	-11.260	13.260	5308.175	12.590	10.900

111-PLANE SILICON

	LNCVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
100.	9161.382	-500	-6.040	5610.460	10.850	9.170	4915.549	-12.360	0.340
101.	9159.934	-530	-5.860	5629.268	10.440	8.860	4936.710	-12.430	0.710
102.	9158.413	-560	-5.680	5648.011	10.710	8.530	4977.936	-12.360	0.450
103.	9156.836	-570	-5.450	5666.511	10.500	8.160	4959.405	-12.210	0.170
104.	9155.220	-580	-5.230	5684.612	10.200	7.610	4941.275	-11.950	7.050
105.	9153.582	-590	-4.980	5702.180	9.640	7.830	4923.661	-11.600	7.510
106.	9151.941	-590	-4.730	5719.034	9.410	7.020	4906.742	-11.160	0.170
107.	9150.313	-580	-4.460	5735.249	8.940	6.800	4794.504	-10.600	0.170
108.	9148.716	-560	-4.170	5750.551	8.410	6.160	4775.243	-10.110	6.340
109.	9147.122	-540	-3.870	5764.917	7.850	5.710	4750.660	-9.450	5.500
110.	9145.694	-520	-3.560	5778.271	7.250	5.240	4727.431	-8.610	5.440
111.	9144.300	-480	-3.240	5790.547	6.610	4.760	4703.203	-7.600	4.350
112.	9143.006	-440	-2.910	5801.666	5.950	4.260	4674.055	-6.450	4.450
113.	9141.826	-400	-2.570	5811.635	5.260	3.760	4714.050	-6.460	3.440
114.	9140.774	-350	-2.220	5820.344	4.550	3.240	4705.379	-5.820	3.400
115.	9139.863	-300	-1.860	5827.769	3.820	2.710	4687.536	-4.740	2.800
116.	9139.102	-250	-1.490	5833.920	3.070	2.160	4681.002	-3.620	2.300
117.	9138.501	-190	-1.130	5838.717	2.320	1.640	4687.003	-2.650	1.730
118.	9138.067	-130	-0.750	5842.158	1.550	1.100	4683.561	-1.530	1.100
119.	9137.804	-060	-0.380	5844.229	0.760	0.550	4681.430	-0.570	0.200
120.	9137.716	-000	0.000	5844.920	0.000	0.000	4680.748	0.000	0.000
121.	9137.804	000	0.380	5844.229	-0.760	-0.550	4681.430	-0.570	-0.200
122.	9138.067	130	0.750	5842.158	-1.550	-1.100	4683.561	-1.530	-1.100
123.	9138.501	190	1.130	5838.717	-2.320	-1.640	4687.003	-2.650	-1.730
124.	9139.102	250	1.490	5833.920	-3.070	-2.160	4681.002	-3.620	-2.300
125.	9139.863	300	1.860	5827.769	-3.820	-2.710	4674.055	-4.740	-2.800
126.	9140.774	350	2.220	5820.344	-4.550	-3.240	4705.379	-5.820	-3.400
127.	9141.826	400	2.570	5811.636	-5.260	-3.760	4714.050	-6.460	-3.440
128.	9143.006	450	2.910	5801.666	-5.950	-4.260	4727.431	-7.600	-4.450
129.	9144.300	480	3.240	5790.547	-6.610	-4.760	4750.660	-8.610	-5.440
130.	9145.694	520	3.560	5778.271	-7.250	-5.240	4775.243	-9.450	-6.340
131.	9147.122	540	3.870	5764.917	-7.850	-5.710	4794.504	-10.110	-7.050
132.	9148.716	560	4.170	5750.551	-8.410	-6.160	4806.742	-10.600	-8.450
133.	9150.313	580	4.460	5735.249	-8.940	-6.800	4823.661	-11.160	-9.710
134.	9151.941	590	4.730	5719.034	-9.410	-7.020	4841.275	-11.600	-11.160
135.	9153.582	590	4.980	5702.180	-9.640	-7.830	4859.405	-12.210	-12.360
136.	9155.220	580	5.230	5684.612	-10.200	-8.160	4877.936	-12.430	-13.450
137.	9156.836	570	5.450	5666.511	-10.500	-8.530	4894.505	-12.360	-14.450
138.	9158.413	560	5.680	5648.011	-10.710	-8.860	4915.549	-12.430	-15.450
139.	9159.934	530	5.860	5629.268	-10.850	-9.170	4936.710	-12.360	-16.450
140.	9161.382	500	6.040	5610.460	-10.440	-8.860	4959.405	-12.360	-17.450
141.	9162.743	470	6.200	5591.796	-10.740	-9.450	4986.742	-12.360	-18.450
142.	9164.001	430	6.350	5573.525	-10.460	-9.720	5014.275	-12.360	-19.450
143.	9165.144	390	6.480	5555.926	-10.030	-9.960	5041.791	-12.360	-20.450
144.	9166.160	340	6.590	5539.336	-9.370	-9.190	5069.405	-12.360	-21.450
145.	9167.036	290	6.680	5524.140	-8.470	-8.300	5097.021	-12.360	-22.450
146.	9167.769	230	6.750	5510.769	-7.250	-7.250	5124.636	-12.360	-23.450
147.	9168.385	180	6.800	5499.686	-5.820	-6.460	5152.251	-12.360	-24.450
148.	9168.761	120	6.870	5491.353	-4.070	-5.000	5180.066	-12.360	-25.450
149.	9169.013	060	6.890	5486.166	-2.100	-4.070	5207.881	-12.360	-26.450

111-PLANE SILICON									
	LNGVEL	LPM112	LPM113	FSRVEL	FSPM112	FSPM113	SSKVEL	SSPM112	SSPM113
150.	9159.097	0.000	6.900	5884.404	-0.000	-10.870	5041.805	-0.000	-9.020
151.	9169.013	-0.060	6.890	5866.166	2.100	-10.050	2040.040	-2.200	-2.020
152.	9168.761	-0.120	6.870	5891.353	4.070	-10.790	5034.846	-4.440	-3.000
153.	9168.345	-0.160	6.820	5899.606	5.620	-10.660	5026.499	-6.370	-3.770
154.	9167.769	-0.230	6.760	5910.769	7.290	-10.550	5015.401	-8.010	-3.730
155.	9167.038	-0.290	6.680	5824.139	8.470	-10.360	5002.011	-9.350	-3.660
156.	9166.160	-0.340	6.590	5839.336	9.370	-10.190	4986.791	-10.410	-3.570
157.	9165.144	-0.390	6.460	5855.926	10.030	-9.960	4970.175	-11.200	-3.450
158.	9164.001	-0.430	6.350	5873.525	10.460	-9.720	4952.547	-11.770	-3.310
159.	9162.743	-0.470	6.200	5891.798	10.740	-9.450	4934.243	-12.190	-3.150
160.	9161.382	-0.500	6.040	5810.461	10.650	-9.170	4915.549	-12.360	-2.940
161.	9159.934	-0.530	5.860	5829.268	10.640	-8.860	4896.710	-12.430	-2.710
162.	9158.413	-0.560	5.660	5848.011	10.710	-8.530	4877.936	-12.300	-2.450
163.	9156.836	-0.570	5.450	5866.511	10.500	-8.160	4859.405	-12.210	-2.140
164.	9155.220	-0.560	5.230	5884.612	10.200	-7.610	4841.275	-11.950	-1.800
165.	9153.562	-0.590	4.980	5702.180	9.840	-7.430	4823.681	-11.600	-1.510
166.	9151.940	-0.590	4.730	5719.094	9.410	-7.020	4806.742	-11.100	-1.150
167.	9150.313	-0.560	4.460	5735.245	8.940	-6.600	4790.565	-10.600	-0.750
168.	9148.716	-0.560	4.170	5750.551	8.410	-6.160	4775.243	-10.110	-0.300
169.	9147.172	-0.540	3.870	5764.917	7.850	-5.710	4760.860	-9.490	-0.300
170.	9145.694	-0.520	3.566	5778.271	7.250	-5.240	4747.431	-8.610	-0.440
171.	9144.300	-0.480	3.240	5790.547	6.610	-4.760	4735.203	-8.000	-0.550
172.	9143.006	-0.450	2.910	5801.686	5.950	-4.260	4724.055	-7.300	-0.550
173.	9141.826	-0.400	2.570	5811.636	5.260	-3.760	4714.099	-6.480	-0.490
174.	9140.774	-0.350	2.220	5820.349	4.550	-3.240	4705.379	-5.620	-0.400
175.	9139.863	-0.300	1.860	5827.709	3.820	-2.710	4697.936	-4.740	-0.280
176.	9139.102	-0.250	1.490	5833.920	3.070	-2.160	4691.602	-3.820	-0.230
177.	9138.501	-0.190	1.130	5838.717	2.320	-1.640	4687.803	-2.890	-1.730
178.	9138.067	-0.130	.750	5842.156	1.550	-1.100	4683.561	-1.930	-1.160
179.	9137.804	-0.060	.380	5844.229	.760	-0.550	4681.490	-0.970	-0.500
180.	9137.716	0.000	-0.000	5844.920	-0.000	0.000	4680.790	0.000	0.000

BULK

110-PLANE SILICON

	LNVEL	LP112	LP113	FSRVEL	FSP112	FSP113	SSRVEL	SSP112	SSP113
0.	9358.539	0.000	-0.000	5098.466	12.530	0.000	5098.451	-12.530	0.000
1.	9358.074	-0.350	-0.000	5118.303	12.560	0.000	5079.392	-11.700	-0.000
2.	9356.664	-1.660	-0.000	5138.297	12.610	0.000	5061.775	-10.610	-0.000
3.	9354.286	-1.010	-0.000	5158.407	12.620	0.000	5045.690	-9.620	-0.000
4.	9350.923	-1.360	-0.000	5178.607	12.620	0.000	5031.212	-8.640	-0.000
5.	9346.559	-1.710	-0.000	5198.670	12.600	0.000	5016.405	-7.770	-0.000
6.	9341.183	-2.070	-0.000	5219.173	12.570	0.000	5007.330	-6.850	-0.000
7.	9334.782	-2.430	-0.000	5239.490	12.530	0.000	4996.040	-5.490	-0.000
8.	9327.351	-2.800	-0.000	5259.795	12.460	0.000	4984.989	-4.290	-0.000
9.	9318.084	-3.160	-0.000	5280.066	12.390	0.000	4981.290	-3.660	-0.000
10.	9309.379	-3.530	-0.000	5300.277	12.300	0.000	4979.531	-3.000	-0.000
11.	9298.837	-3.900	-0.000	5320.405	12.200	0.000	4979.531	-2.330	-0.000
12.	9287.261	-4.270	-0.000	5340.426	12.090	0.000	4979.531	-1.660	-0.000
13.	9274.657	-4.630	-0.000	5360.318	11.960	0.000	4979.531	-0.990	-0.000
14.	9261.034	-5.000	-0.000	5380.057	11.820	0.000	4981.821	2.640	-0.000
15.	9246.402	-5.360	-0.000	5399.621	11.670	0.000	4985.686	3.310	-0.000
16.	9230.776	-5.710	-0.000	5418.969	11.510	0.000	4991.000	4.070	-0.000
17.	9214.177	-6.060	-0.000	5438.139	11.340	0.000	4994.011	4.810	-0.000
18.	9196.621	-6.410	-0.000	5457.051	11.160	0.000	5009.631	5.540	-0.000
19.	9178.132	-6.750	-0.000	5475.703	10.960	0.000	5021.313	6.260	-0.000
20.	9158.736	-7.070	-0.000	5494.076	10.760	0.000	5034.617	6.930	-0.000
21.	9138.469	-7.390	-0.000	5512.150	10.550	0.000	5050.095	7.600	-0.000
22.	9117.357	-7.700	-0.000	5529.907	10.330	0.000	5067.090	8.260	-0.000
23.	9095.442	-8.000	-0.000	5547.327	10.100	0.000	5085.739	8.930	-0.000
24.	9072.762	-8.260	-0.000	5564.394	9.860	0.000	5105.965	9.600	-0.000
25.	9049.363	-8.550	-0.000	5581.089	9.620	0.000	5127.702	10.260	-0.000
26.	9025.295	-8.800	-0.000	5597.395	9.360	0.000	5150.053	10.930	-0.000
27.	9000.611	-9.030	-0.000	5613.296	9.100	0.000	5175.329	11.600	-0.000
28.	8975.360	-9.250	-0.000	5628.777	8.830	0.000	5201.031	12.260	-0.000
29.	8949.630	-9.440	-0.000	5643.822	8.560	0.000	5227.053	12.930	-0.000
30.	8923.466	-9.600	-0.000	5658.416	8.260	0.000	5252.683	13.600	-0.000
31.	8896.947	-9.750	-0.000	5672.545	7.990	0.000	5278.432	14.260	-0.000
32.	8870.154	-9.860	-0.000	5686.195	7.690	0.000	5313.886	14.930	-0.000
33.	8843.171	-9.940	-0.000	5699.353	7.390	0.000	5344.003	15.600	-0.000
34.	8816.089	-9.990	-0.000	5712.007	7.090	0.000	5374.618	16.260	-0.000
35.	8789.006	-10.000	-0.000	5724.144	6.780	0.000	5405.586	16.930	-0.000
36.	8762.024	-9.970	-0.000	5735.754	6.460	0.000	5436.761	17.600	-0.000
37.	8735.254	-9.910	-0.000	5746.824	6.140	0.000	5467.967	18.260	-0.000
38.	8708.614	-9.790	0.000	5757.345	5.820	0.000	5499.105	18.930	-0.000
39.	8682.625	-9.630	0.000	5767.306	5.490	0.000	5529.351	19.600	-0.000
40.	8657.417	-9.420	0.000	5776.702	5.160	0.000	5560.353	20.260	-0.000
41.	8632.726	-9.160	0.000	5785.519	4.830	0.000	5590.139	20.930	-0.000
42.	8608.692	-8.840	0.000	5793.752	4.490	0.000	5619.130	21.600	-0.000
43.	8584.958	-8.460	0.000	5801.391	4.150	0.000	5647.144	22.260	-0.000
44.	8561.373	-8.020	0.000	5808.432	3.800	0.000	5674.000	22.930	-0.000
45.	8538.984	-7.520	0.000	5814.867	3.460	0.000	5699.513	23.600	-0.000
46.	8515.042	-6.960	0.000	5820.690	3.110	0.000	5723.502	24.260	-0.000
47.	8490.690	-6.340	0.000	5825.896	2.760	0.000	5745.786	24.930	-0.000
48.	8462.071	-5.670	0.000	5830.481	2.400	0.000	5766.191	25.600	-0.000
49.	8438.316	-4.940	0.000	5834.440	2.050	0.000	5784.551	26.260	-0.000

110-PLANE SILICON

	LNQVEL	LPN112	LPN113	FSRVEL	FSPN112	FSPN113	SSRVEL	SSPN112	SSPN113
50.	8466.553	-4.150	0.000	5837.770	1.690	0.000	5014.529	7.600	-0.000
51.	8456.885	-3.330	0.000	5840.466	1.340	-0.000	5025.678	5.660	-0.000
52.	8449.406	-2.470	0.000	5842.531	.980	-0.000	5034.654	4.190	-0.000
53.	8444.191	-1.580	0.000	5843.956	.620	0.000	5040.772	2.660	-0.000
54.	8441.291	-.240	0.000	5844.747	.260	-0.000	5044.173	1.140	-0.000
55.	8440.736	1.150	0.000	5844.698	-.090	0.000	5044.024	-.410	-0.000
56.	8442.531	2.050	0.000	5844.410	-.450	0.000	5042.718	-1.950	-0.000
57.	8446.659	2.930	0.000	5843.284	-.810	0.000	5037.877	-3.480	-0.000
58.	8453.077	3.770	0.000	5841.521	-1.170	0.000	5030.346	-4.970	-0.000
59.	8461.722	4.570	0.000	5839.122	-1.530	0.000	5020.200	-6.420	-0.000
60.	8472.510	5.330	0.000	5836.091	-1.860	-0.000	5007.533	-7.800	-0.000
61.	8485.335	6.030	0.000	5832.428	-2.240	-0.000	5792.462	-9.120	-0.000
62.	8500.094	6.600	0.000	5826.136	-2.590	-0.000	5775.122	-10.360	-0.000
63.	8516.645	7.070	0.000	5823.225	-2.940	0.000	5755.661	-11.520	-0.000
64.	8534.654	7.270	0.000	5817.692	-3.290	-0.000	5734.243	-12.500	-0.000
65.	8554.575	7.790	0.000	5811.545	-3.640	-0.000	5711.037	-13.560	-0.000
66.	8575.670	8.260	0.000	5804.790	-3.960	-0.000	5686.221	-14.440	-0.000
67.	8597.961	8.670	0.000	5797.432	-4.330	-0.000	5653.376	-15.230	-0.000
68.	8621.361	9.010	0.000	5789.476	-4.670	-0.000	5632.405	-15.930	-0.000
69.	8645.666	9.300	0.000	5780.936	-5.000	0.000	5603.333	-16.530	-0.000
70.	8670.752	9.540	0.000	5771.813	-5.340	-0.000	5574.500	-17.040	-0.000
71.	8696.483	9.720	0.000	5762.116	-5.670	-0.000	5544.367	-17.450	-0.000
72.	8722.726	9.860	0.000	5751.854	-5.990	-0.000	5513.709	-17.760	-0.000
73.	8749.355	9.950	0.000	5741.047	-6.310	-0.000	5482.690	-18.020	-0.000
74.	8776.251	9.990	0.000	5729.690	-6.630	-0.000	5451.503	-18.170	-0.000
75.	8803.300	10.000	0.000	5717.801	-6.940	0.000	5420.284	-18.240	-0.000
76.	8830.395	9.970	0.000	5705.389	-7.250	0.000	5389.200	-18.220	-0.000
77.	8857.436	9.900	0.000	5692.466	-7.550	-0.000	5358.400	-18.120	-0.000
78.	8884.330	9.600	0.000	5679.046	-7.850	-0.000	5328.030	-17.940	-0.000
79.	8910.988	9.670	-0.000	5665.144	-8.140	0.000	5296.231	-17.660	-0.000
80.	8937.330	9.520	0.000	5650.767	-8.420	0.000	5263.135	-17.330	-0.000
81.	8963.276	9.340	0.000	5635.934	-8.700	-0.000	5240.670	-16.910	-0.000
82.	8988.762	9.140	-0.000	5620.657	-8.970	-0.000	5213.550	-16.410	-0.000
83.	9013.717	8.910	0.000	5604.952	-9.240	-0.000	5187.314	-15.830	-0.000
84.	9038.063	8.670	-0.000	5588.835	-9.500	0.000	5162.247	-15.160	-0.000
85.	9061.804	8.410	0.000	5572.321	-9.750	-0.000	5136.450	-14.450	-0.000
86.	9084.829	8.130	0.000	5555.426	-9.990	0.000	5116.045	-13.660	-0.000
87.	9107.111	7.640	0.000	5538.172	-10.220	0.000	5092.095	-12.790	-0.000
88.	9128.607	7.540	-0.000	5520.572	-10.450	-0.000	5075.691	-11.600	-0.000
89.	9149.276	7.230	-0.000	5502.645	-10.660	0.000	5057.507	-10.270	-0.000
90.	9169.069	6.900	0.000	5484.411	-10.870	-0.000	5041.611	-9.620	-0.000
91.	9188.009	6.570	-0.000	5465.886	-11.070	0.000	5027.463	-8.720	-0.000
92.	9206.008	6.230	0.000	5447.097	-11.250	0.000	5014.915	-7.570	-0.000
93.	9223.063	5.860	0.000	5428.057	-11.430	-0.000	5004.212	-6.360	-0.000
94.	9239.150	5.520	-0.000	5408.789	-11.608	0.000	4995.390	-5.160	-0.000
95.	9254.252	5.170	-0.000	5389.314	-11.750	0.000	4980.479	-3.910	-0.000
96.	9268.353	4.800	-0.000	5369.655	-11.900	0.000	4963.498	-2.640	-0.000
97.	9281.440	4.440	0.000	5349.833	-12.030	0.000	4948.460	-1.360	-0.000
98.	9293.502	4.070	0.000	5329.870	-12.150	-0.000	4933.370	-.080	-0.000
99.	9304.533	3.700	-0.000	5309.769	-12.260	-0.000	4908.223	1.260	-0.000

BULK

110-PLANE SILICON									
	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	9314.527	3.340	-0.000	5265.615	-12.356	-0.000	4983.009	2.470	-0.000
101.	9323.484	2.970	0.000	5265.369	-12.430	0.000	4987.736	3.710	-0.000
102.	9331.404	2.600	-0.000	5249.077	-12.500	0.000	4994.266	4.930	-0.000
103.	9338.290	2.240	0.000	5228.762	-12.550	0.000	5002.720	6.110	-0.000
104.	9344.144	1.860	0.000	5208.450	-12.590	0.000	5012.359	7.250	-0.000
105.	9348.965	1.520	0.000	5188.155	-12.610	0.000	5024.955	8.340	-0.000
106.	9352.822	1.170	0.000	5167.932	-12.620	0.000	5036.652	9.360	-0.000
107.	9355.663	.820	0.000	5147.776	-12.620	0.000	5053.467	10.360	-0.000
108.	9357.526	.450	-0.000	5127.725	-12.590	-0.000	5070.691	11.290	-0.000
109.	9358.436	.150	0.000	5107.602	-12.520	-0.000	5089.287	12.150	-0.000
110.	9358.411	-.170	-0.000	5088.034	-12.500	-0.000	5109.096	12.940	-0.000
111.	9357.476	-.460	0.000	5068.466	-12.420	0.000	5130.231	13.660	-0.000
112.	9355.663	-.750	0.000	5049.089	-12.330	-0.000	5152.600	14.320	-0.000
113.	9352.999	-1.060	0.000	5029.923	-12.220	-0.000	5176.105	14.900	-0.000
114.	9349.515	-1.360	0.000	5011.036	-12.100	0.000	5200.656	15.420	-0.000
115.	9345.259	-1.630	0.000	4992.435	-11.950	-0.000	5226.139	15.860	-0.000
116.	9340.260	-1.860	-0.000	4974.166	-11.790	0.000	5252.449	16.230	-0.000
117.	9334.564	-2.120	0.000	4956.154	-11.610	0.000	5279.476	16.530	-0.000
118.	9328.216	-2.340	0.000	4938.606	-11.410	0.000	5307.106	16.760	-0.000
119.	9321.265	-2.550	0.000	4921.486	-11.190	-0.000	5335.222	16.920	-0.000
120.	9313.763	-2.730	0.000	4904.615	-10.960	0.000	5363.706	17.000	-0.000
121.	9305.764	-2.900	0.000	4888.271	-10.700	0.000	5392.437	17.020	-0.000
122.	9297.326	-3.050	-0.000	4872.366	-10.420	0.000	5421.291	16.970	-0.000
123.	9288.508	-3.170	-0.000	4856.988	-10.130	0.000	5450.146	16.850	-0.000
124.	9279.374	-3.260	0.000	4842.101	-9.820	-0.000	5478.976	16.670	-0.000
125.	9269.990	-3.360	0.000	4827.766	-9.490	0.000	5507.356	16.410	-0.000
126.	9260.423	-3.410	0.000	4813.946	-9.140	0.000	5535.456	16.090	-0.000
127.	9250.743	-3.440	0.000	4800.726	-8.770	0.000	5563.057	15.710	-0.000
128.	9241.022	-3.450	0.000	4788.104	-8.360	0.000	5590.027	15.260	-0.000
129.	9231.333	-3.430	0.000	4776.059	-7.960	0.000	5616.242	14.740	-0.000
130.	9221.752	-3.360	-0.000	4764.733	-7.560	0.000	5641.261	14.170	-0.000
131.	9212.352	-3.300	0.000	4754.022	-7.130	0.000	5665.921	13.530	-0.000
132.	9203.209	-3.200	0.000	4743.966	-6.660	0.000	5689.143	12.840	-0.000
133.	9194.395	-3.070	0.000	4734.640	-6.210	0.000	5711.132	12.060	-0.000
134.	9185.993	-2.920	0.000	4726.000	-5.730	0.000	5731.776	11.270	-0.000
135.	9178.063	-2.740	0.000	4718.081	-5.240	0.000	5750.973	10.410	-0.000
136.	9170.679	-2.540	0.000	4710.895	-4.760	0.000	5768.616	9.490	-0.000
137.	9163.905	-2.310	0.000	4704.455	-4.220	0.000	5784.614	8.530	-0.000
138.	9157.083	-2.060	0.000	4698.771	-3.700	0.000	5798.600	7.530	-0.000
139.	9152.426	-1.750	0.000	4693.854	-3.170	0.000	5811.334	6.460	-0.000
140.	9147.630	-1.560	0.000	4689.712	-2.620	0.000	5821.908	5.400	-0.000
141.	9144.053	-1.200	0.000	4686.352	-2.060	0.000	5830.541	4.300	-0.000
142.	9141.133	-.890	0.000	4683.780	-1.530	0.000	5837.184	3.170	-0.000
143.	9139.097	-.570	0.000	4681.995	-.970	0.000	5841.799	2.020	-0.000
144.	9137.965	-.240	-0.000	4681.014	-.410	-0.000	5844.358	.860	-0.000
145.	9137.748	.090	0.000	4680.826	.150	0.000	5844.648	-.310	-0.000
146.	9138.449	.420	0.000	4681.435	.710	0.000	5843.264	-1.470	-0.000
147.	9140.060	.740	0.000	4682.840	1.260	0.000	5839.617	-2.630	-0.000
148.	9142.566	1.060	0.000	4685.039	1.820	0.000	5833.927	-3.770	-0.000
149.	9145.943	1.360	0.000	4688.026	2.370	0.000	5826.226	-4.860	-0.000

110-PLANE SILICON										BULK	
	LNGLVL	LPHI12	LPHI13	FSRWEL	FSPH12	FSPH13	SSRWEL	SSPH12	SSPH13		
150.	9150.156	1.660	0.000	4691.802	2.910	0.000	5016.563	-5.960	-0.000		
151.	9155.172	1.930	0.000	4696.354	3.456	0.000	5004.980	-7.040	-0.000		
152.	9160.936	2.190	0.000	4701.677	3.980	0.000	5001.568	-8.660	-0.000		
153.	9167.402	2.430	0.000	4707.761	4.500	0.000	5000.376	-9.040	-0.000		
154.	9174.506	2.650	0.000	4714.597	5.010	0.000	5000.500	-9.560	-0.000		
155.	9182.186	2.840	0.000	4722.172	5.500	0.000	5000.000	-10.670	-0.000		
156.	9190.376	3.010	0.000	4730.473	5.990	0.000	5000.000	-11.710	-0.000		
157.	9199.085	3.150	0.000	4739.486	6.460	0.000	5000.000	-12.490	0.000		
158.	9208.000	3.260	0.000	4749.200	6.920	0.000	5000.000	-13.210	0.000		
159.	9217.288	3.350	0.000	4759.595	7.360	0.000	5000.000	-13.680	0.000		
160.	9226.793	3.410	0.000	4770.654	7.790	0.000	5000.000	-14.480	0.000		
161.	9236.440	3.440	0.000	4782.359	8.200	0.000	5000.000	-15.020	0.000		
162.	9246.155	3.450	0.000	4794.693	8.590	0.000	5000.000	-15.500	0.000		
163.	9255.863	3.430	0.000	4807.634	8.970	0.000	5000.000	-15.920	0.000		
164.	9265.493	3.350	0.000	4821.163	9.320	0.000	5000.000	-16.270	0.000		
165.	9274.972	3.220	0.000	4835.258	9.660	0.000	5000.000	-16.550	0.000		
166.	9284.233	3.110	0.000	4849.896	9.990	-0.000	5000.000	-16.770	0.000		
167.	9293.207	2.970	0.000	4865.056	10.250	-0.000	5000.000	-16.920	0.000		
168.	9301.632	2.810	0.000	4880.714	10.570	0.000	5000.000	-17.010	0.000		
169.	9310.046	2.640	0.000	4896.847	10.840	0.000	5000.000	-17.020	0.000		
170.	9317.790	2.440	0.000	4913.429	11.080	0.000	5000.000	-16.970	0.000		
171.	9325.007	2.230	-0.000	4930.437	11.310	0.000	5000.000	-16.840	0.000		
172.	9331.646	2.000	0.000	4947.846	11.520	0.000	5000.000	-16.650	0.000		
173.	9337.656	1.750	0.000	4965.629	11.710	0.000	5000.000	-16.380	0.000		
174.	9342.989	1.450	0.000	4983.763	11.880	-0.000	5000.000	-16.040	0.000		
175.	9347.603	1.210	0.000	5002.220	12.030	0.000	5000.000	-15.640	0.000		
176.	9351.456	0.930	0.000	5020.974	12.170	0.000	5000.000	-15.160	0.000		
177.	9354.510	0.630	0.000	5040.001	12.260	0.000	5000.000	-14.600	0.000		
178.	9356.729	0.320	0.000	5059.273	12.300	0.000	5000.000	-13.960	0.000		
179.	9358.082	0.000	0.000	5076.765	12.460	0.000	5000.000	-13.290	0.000		
180.	9358.539	0.000	-0.000	5096.451	12.530	0.000	5000.000	-12.530	0.000		

Z-PLANE (XY-PLANE) SPINEL

BULK

	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
0.	6826.732	0.000	0.000	6536.474	0.000	0.000	6536.474	0.000	0.000
1.	6829.708	2.200	0.000	6532.465	-4.020	0.000	6536.474	0.000	0.000
2.	6838.530	4.340	0.000	6520.512	-7.930	0.000	6536.474	0.000	0.000
3.	6855.012	6.350	0.000	6500.837	-11.670	0.000	6536.474	0.000	0.000
4.	6872.813	8.200	0.000	6473.785	-15.150	0.000	6536.474	0.000	0.000
5.	6897.507	9.860	0.000	6439.803	-18.350	0.000	6536.474	0.000	0.000
6.	6926.605	11.300	0.000	6399.806	-21.240	0.000	6536.474	0.000	0.000
7.	6959.581	12.520	0.000	6353.157	-23.840	0.000	6536.474	0.000	0.000
8.	6995.901	13.540	0.000	6301.624	-26.140	0.000	6536.474	0.000	0.000
9.	7035.040	14.360	0.000	6245.378	-28.190	0.000	6536.474	0.000	0.000
10.	7076.499	15.000	0.000	6184.970	-30.000	0.000	6536.474	0.000	0.000
11.	9119.813	15.460	0.000	6120.924	-31.590	0.000	6536.474	0.000	0.000
12.	9164.552	15.620	0.000	6053.732	-33.000	0.000	6536.474	-0.000	0.000
13.	9210.329	16.030	0.000	5983.856	-34.240	0.000	6536.474	0.000	0.000
14.	9256.794	16.120	0.000	5911.722	-35.330	0.000	6536.474	0.000	0.000
15.	9303.634	16.120	0.000	5837.730	-36.280	0.000	6536.474	0.000	0.000
16.	9350.569	16.030	0.000	5762.453	-37.110	0.000	6536.474	0.000	0.000
17.	9397.351	15.670	0.000	5685.639	-37.840	0.000	6536.474	0.000	0.000
18.	9443.759	15.640	0.000	5608.218	-38.450	0.000	6536.474	0.000	0.000
19.	9489.596	15.360	0.000	5530.303	-38.960	0.000	6536.474	0.000	0.000
20.	9534.688	15.020	0.000	5452.193	-39.360	0.000	6536.474	0.000	0.000
21.	9578.879	14.650	0.000	5374.177	-39.780	0.000	6536.474	0.000	0.000
22.	9622.026	14.230	0.000	5296.534	-39.930	0.000	6536.474	0.000	0.000
23.	9664.012	13.760	0.000	5219.537	-40.050	0.000	6536.474	0.000	0.000
24.	9704.720	13.300	0.000	5143.453	-40.060	0.000	6536.474	0.000	0.000
25.	9744.050	12.790	0.000	5068.548	-40.000	0.000	6536.474	0.000	0.000
26.	9781.914	12.260	0.000	4995.082	-39.810	0.000	6536.474	0.000	0.000
27.	9818.231	11.710	0.000	4923.315	-39.500	0.000	6536.474	0.000	0.000
28.	9852.928	11.140	0.000	4853.805	-39.060	0.000	6536.474	0.000	0.000
29.	9885.938	10.550	0.000	4785.986	-38.770	0.000	6536.474	0.000	0.000
30.	9917.204	9.950	0.000	4720.779	-37.760	0.000	6536.474	0.000	0.000
31.	9946.672	9.340	0.000	4658.370	-36.860	0.000	6536.474	0.000	0.000
32.	9974.294	8.710	0.000	4598.930	-35.750	0.000	6536.474	0.000	0.000
33.	10000.027	8.080	0.000	4542.704	-34.520	0.000	6536.474	0.000	0.000
34.	10023.831	7.430	0.000	4489.933	-33.040	0.000	6536.474	0.000	0.000
35.	10045.674	6.700	0.000	4440.847	-31.320	0.000	6536.474	0.000	0.000
36.	10065.524	6.120	0.000	4395.671	-29.360	0.000	6536.474	0.000	0.000
37.	10083.353	5.460	0.000	4354.615	-27.120	0.000	6536.474	0.000	0.000
38.	10099.139	4.790	0.000	4317.879	-24.610	0.000	6536.474	0.000	0.000
39.	10112.861	4.110	0.000	4285.844	-21.810	0.000	6536.474	0.000	0.000
40.	10124.500	3.430	0.000	4258.874	-18.720	0.000	6536.474	0.000	0.000
41.	10134.043	2.750	0.000	4235.312	-15.370	0.000	6536.474	0.000	0.000
42.	10141.477	2.080	0.000	4217.479	-11.770	0.000	6536.474	0.000	0.000
43.	10146.794	1.360	0.000	4204.672	-7.970	0.000	6536.474	0.000	0.000
44.	10149.587	.690	0.000	4196.959	-4.020	0.000	6536.474	0.000	0.000
45.	10151.051	0.000	0.000	4194.383	0.000	0.000	6536.474	0.000	0.000
46.	10149.987	-.690	0.000	4196.959	4.020	0.000	6536.474	0.000	0.000
47.	10146.794	-1.360	0.000	4204.672	7.970	0.000	6536.474	0.000	0.000
48.	10141.477	-2.080	0.000	4217.479	11.770	0.000	6536.474	0.000	0.000
49.	10134.043	-2.750	0.000	4235.312	15.370	0.000	6536.474	0.000	0.000

Z-PLANE (XY-PLANE) SPINEL										BULK									
	LNGL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13										
50.	10124.500	-3.430	0.000	4258.074	18.720	0.000	6536.474	-0.000	0.000										
51.	10112.861	-4.110	0.000	4285.644	21.810	0.000	6536.474	0.000	0.000										
52.	10099.139	-4.750	0.000	4317.879	24.610	0.000	6536.474	0.000	0.000										
53.	10083.353	-5.460	0.000	4354.615	27.120	0.000	6536.474	0.000	0.000										
54.	10065.524	-6.120	0.000	4395.671	29.360	0.000	6536.474	0.000	0.000										
55.	10045.674	-6.760	0.000	4440.847	31.320	0.000	6536.474	0.000	0.000										
56.	10023.831	-7.430	0.000	4489.933	33.040	0.000	6536.474	0.000	0.000										
57.	10000.027	-8.060	0.000	4542.704	34.520	0.000	6536.474	0.000	0.000										
58.	9974.294	-8.710	0.000	4598.930	35.790	0.000	6536.474	0.000	0.000										
59.	9946.672	-9.340	0.000	4658.370	36.860	0.000	6536.474	0.000	0.000										
60.	9917.204	-9.950	0.000	4720.779	37.760	0.000	6536.474	0.000	0.000										
61.	9885.936	-10.550	0.000	4785.906	38.480	0.000	6536.474	0.000	0.000										
62.	9852.928	-11.140	0.000	4853.505	39.060	0.000	6536.474	0.000	0.000										
63.	9816.231	-11.710	0.000	4923.315	39.500	0.000	6536.474	0.000	0.000										
64.	9781.914	-12.260	0.000	4995.082	39.810	0.000	6536.474	0.000	0.000										
65.	9744.050	-12.790	0.000	5068.546	40.000	0.000	6536.474	0.000	0.000										
66.	9704.720	-13.300	0.000	5143.453	40.080	0.000	6536.474	0.000	0.000										
67.	9664.012	-13.780	0.000	5219.537	40.050	0.000	6536.474	0.000	0.000										
68.	9622.028	-14.230	0.000	5296.534	39.930	0.000	6536.474	0.000	0.000										
69.	9576.875	-14.650	0.000	5374.177	39.700	0.000	6536.474	0.000	0.000										
70.	9534.688	-15.020	0.000	5452.193	39.380	0.000	6536.474	0.000	0.000										
71.	9489.596	-15.360	0.000	5530.303	38.960	0.000	6536.474	0.000	0.000										
72.	9443.759	-15.640	0.000	5608.216	38.450	0.000	6536.474	0.000	0.000										
73.	9397.351	-15.870	0.000	5685.635	37.840	0.000	6536.474	0.000	0.000										
74.	9350.569	-16.030	0.000	5762.253	37.110	0.000	6536.474	0.000	0.000										
75.	9303.634	-16.120	0.000	5837.730	36.260	0.000	6536.474	0.000	0.000										
76.	9256.794	-16.120	0.000	5911.722	35.330	0.000	6536.474	0.000	0.000										
77.	9210.329	-16.030	0.000	5983.856	34.240	0.000	6536.474	0.000	0.000										
78.	9164.552	-15.820	0.000	6053.732	33.000	0.000	6536.474	0.000	0.000										
79.	9119.813	-15.480	0.000	6120.924	31.590	0.000	6536.474	0.000	0.000										
80.	9076.499	-15.000	0.000	6184.970	30.000	0.000	6536.474	0.000	0.000										
81.	9035.040	-14.360	0.000	6245.376	28.190	0.000	6536.474	0.000	0.000										
82.	8995.901	-13.540	0.000	6301.624	26.140	0.000	6536.474	0.000	0.000										
83.	8959.581	-12.520	0.000	6353.157	23.840	0.000	6536.474	0.000	0.000										
84.	8926.605	-11.360	0.000	6399.406	21.240	0.000	6536.474	0.000	0.000										
85.	8897.507	-9.860	0.000	6439.803	18.350	0.000	6536.474	0.000	0.000										
86.	8872.813	-8.200	0.000	6473.785	15.150	0.000	6536.474	0.000	0.000										
87.	8853.012	-6.350	0.000	6500.837	11.670	0.000	6536.474	0.000	0.000										
88.	8838.530	-4.340	0.000	6520.512	7.530	0.000	6536.474	0.000	0.000										
89.	8829.700	-2.200	0.000	6532.465	4.020	0.000	6536.474	0.000	0.000										
90.	8826.732	0.000	0.000	6536.474	-0.000	0.000	6536.474	0.000	0.000										
91.	8829.700	2.200	0.000	6532.465	-4.020	0.000	6536.474	0.000	0.000										
92.	8838.530	4.340	0.000	6520.512	-7.530	0.000	6536.474	0.000	0.000										
93.	8853.012	6.350	0.000	6500.837	-11.670	0.000	6536.474	0.000	0.000										
94.	8872.813	8.200	0.000	6473.785	-15.150	0.000	6536.474	0.000	0.000										
95.	8897.507	9.860	0.000	6439.803	-18.350	0.000	6536.474	0.000	0.000										
96.	8926.605	11.360	0.000	6399.406	-21.240	0.000	6536.474	0.000	0.000										
97.	8959.581	12.520	0.000	6353.157	-23.840	0.000	6536.474	0.000	0.000										
98.	8995.901	13.540	0.000	6301.624	-26.140	0.000	6536.474	0.000	0.000										
99.	9035.040	14.360	0.000	6245.376	-28.190	0.000	6536.474	0.000	0.000										

Z-PLANE (XY-PLANE) SPINEL

	LMVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
100.	9876.499	15.000	0.000	6184.970	-30.000	0.000	6536.474	-0.000	0.000
101.	9119.813	15.480	0.000	6120.924	-31.590	0.000	6536.474	0.000	0.000
102.	9164.552	15.820	0.000	6051.732	-33.000	0.000	6536.474	0.000	0.000
103.	9210.329	16.030	0.000	5983.656	-34.240	0.000	6536.474	0.000	0.000
104.	9256.794	16.120	0.000	5911.722	-35.330	0.000	6536.474	0.000	0.000
105.	9303.634	16.120	0.000	5837.730	-36.286	0.000	6536.474	0.000	0.000
106.	9350.569	16.030	0.000	5762.253	-37.110	0.000	6536.474	0.000	0.000
107.	9397.351	15.870	0.000	5685.639	-37.840	0.000	6536.474	0.000	0.000
108.	9443.759	15.640	0.000	5608.216	-38.450	0.000	6536.474	0.000	0.000
109.	9489.596	15.360	0.000	5530.303	-38.960	0.000	6536.474	0.000	0.000
110.	9534.688	15.020	0.000	5452.193	-39.360	0.000	6536.474	0.000	0.000
111.	9578.879	14.650	0.000	5374.177	-39.700	0.000	6536.474	0.000	0.000
112.	9622.028	14.230	0.000	5296.534	-39.930	0.000	6536.474	0.000	0.000
113.	9664.812	13.760	0.000	5219.537	-40.050	0.000	6536.474	0.000	0.000
114.	9704.720	13.300	0.000	5143.453	-40.050	0.000	6536.474	0.000	0.000
115.	9744.050	12.790	0.000	5068.546	-40.000	0.000	6536.474	0.000	0.000
116.	9781.914	12.260	0.000	4995.082	-39.810	0.000	6536.474	0.000	0.000
117.	9818.231	11.710	0.000	4923.315	-39.500	0.000	6536.474	0.000	0.000
118.	9852.928	11.140	0.000	4853.505	-39.060	0.000	6536.474	0.000	0.000
119.	9885.936	10.550	0.000	4785.906	-38.460	0.000	6536.474	0.000	0.000
120.	9917.204	9.950	0.000	4720.779	-37.760	0.000	6536.474	0.000	0.000
121.	9946.672	9.340	0.000	4658.373	-36.860	0.000	6536.474	0.000	0.000
122.	9974.294	8.710	0.000	4598.930	-35.790	0.000	6536.474	0.000	0.000
123.	10000.027	8.060	0.000	4542.704	-34.520	0.000	6536.474	0.000	0.000
124.	10023.831	7.430	0.000	4489.933	-33.040	0.000	6536.474	0.000	0.000
125.	10045.674	6.780	0.000	4440.847	-31.320	0.000	6536.474	0.000	0.000
126.	10065.524	6.120	0.000	4395.671	-29.360	0.000	6536.474	0.000	0.000
127.	10083.353	5.460	0.000	4354.615	-27.120	0.000	6536.474	0.000	0.000
128.	10099.134	4.790	0.000	4317.879	-24.610	0.000	6536.474	0.000	0.000
129.	10112.861	4.110	0.000	4285.644	-21.810	0.000	6536.474	0.000	0.000
130.	10124.500	3.430	0.000	4258.074	-18.720	0.000	6536.474	0.000	0.000
131.	10134.043	2.750	0.000	4235.312	-15.370	0.000	6536.474	0.000	0.000
132.	10141.477	2.060	0.000	4217.474	-11.770	0.000	6536.474	0.000	0.000
133.	10146.794	1.360	0.000	4204.672	-7.970	0.000	6536.474	0.000	0.000
134.	10149.987	.690	0.000	4196.959	-4.020	0.000	6536.474	0.000	0.000
135.	10151.051	-0.000	0.000	4194.383	0.000	0.000	6536.474	0.000	0.000
136.	10149.987	-.690	0.000	4196.959	4.020	0.000	6536.474	0.000	0.000
137.	10146.794	-1.360	0.000	4204.672	7.970	0.000	6536.474	0.000	0.000
138.	10141.477	-2.060	0.000	4217.479	11.770	0.000	6536.474	0.000	0.000
139.	10134.043	-2.750	0.000	4235.312	15.370	0.000	6536.474	0.000	0.000
140.	10124.500	-3.430	0.000	4258.074	18.720	0.000	6536.474	0.000	0.000
141.	10112.861	-4.110	0.000	4285.644	21.810	0.000	6536.474	0.000	0.000
142.	10099.135	-4.790	0.000	4317.879	24.610	0.000	6536.474	0.000	0.000
143.	10083.353	-5.460	0.000	4354.615	27.120	0.000	6536.474	0.000	0.000
144.	10065.524	-6.120	0.000	4395.671	29.360	0.000	6536.474	0.000	0.000
145.	10045.674	-6.780	0.000	4440.847	31.320	0.000	6536.474	0.000	0.000
146.	10023.831	-7.430	0.000	4489.933	33.040	0.000	6536.474	0.000	0.000
147.	10000.027	-8.060	0.000	4542.704	34.520	0.000	6536.474	0.000	0.000
148.	9974.294	-8.710	0.000	4598.930	35.790	0.000	6536.474	0.000	0.000
149.	9946.672	-9.340	0.000	4658.370	36.860	0.000	6536.474	0.000	0.000

BULK

Z-PLANE (XY-PLANE) SPINEL									
	LPM12		LPM13		FSRVEL		FSPH12		SSPH12
	LNGVEL								
150.	9917.204	-9.950	0.000	0.000	4720.779	37.760	0.000	6536.474	SSPH13
151.	9885.936	-10.550	0.000	0.000	4785.906	38.480	0.000	6536.474	0.000
152.	9852.926	-11.140	0.000	0.000	4853.505	39.060	0.000	6536.474	0.000
153.	9818.231	-11.710	0.000	0.000	4923.315	39.506	0.000	6536.474	0.000
154.	9781.914	-12.260	0.000	0.000	4995.082	39.810	0.000	6536.474	0.000
155.	9744.050	-12.790	0.000	0.000	5068.548	40.000	0.000	6536.474	0.000
156.	9704.720	-13.300	0.000	0.000	5143.453	40.060	0.000	6536.474	0.000
157.	9664.012	-13.780	0.000	0.000	5219.537	40.050	0.000	6536.474	0.000
158.	9622.016	-14.230	0.000	0.000	5296.534	39.530	0.000	6536.474	0.000
159.	9578.879	-14.650	0.000	0.000	5374.177	39.700	0.000	6536.474	0.000
160.	9534.686	-15.020	0.000	0.000	5452.193	39.360	0.000	6536.474	0.000
161.	9489.596	-15.360	0.000	0.000	5530.303	38.960	0.000	6536.474	0.000
162.	9443.759	-15.640	0.000	0.000	5608.218	38.450	0.000	6536.474	0.000
163.	9397.351	-15.870	0.000	0.000	5685.635	37.840	0.000	6536.474	0.000
164.	9350.569	-16.030	0.000	0.000	5762.253	37.110	0.000	6536.474	0.000
165.	9303.634	-16.120	0.000	0.000	5837.730	36.260	0.000	6536.474	0.000
166.	9256.794	-16.120	0.000	0.000	5911.722	35.330	0.000	6536.474	0.000
167.	9210.329	-16.030	0.000	0.000	5983.856	34.240	0.000	6536.474	0.000
168.	9164.552	-15.820	0.000	0.000	6053.732	33.000	0.000	6536.474	0.000
169.	9119.813	-15.460	0.000	0.000	6120.924	31.590	0.000	6536.474	0.000
170.	9076.494	-15.000	0.000	0.000	6184.970	30.000	0.000	6536.474	0.000
171.	9035.040	-14.360	0.000	0.000	6245.376	28.150	0.000	6536.474	0.000
172.	8995.901	-13.540	0.000	0.000	6301.624	26.140	0.000	6536.474	0.000
173.	8959.561	-12.520	0.000	0.000	6353.157	23.640	0.000	6536.474	0.000
174.	8926.605	-11.300	0.000	0.000	6399.406	21.240	0.000	6536.474	0.000
175.	8897.507	-9.860	0.000	0.000	6439.803	18.350	0.000	6536.474	0.000
176.	8872.813	-8.200	0.000	0.000	6473.785	15.150	0.000	6536.474	0.000
177.	8853.012	-6.350	0.000	0.000	6500.837	11.670	0.000	6536.474	0.000
178.	8838.530	-4.340	0.000	0.000	6520.512	7.930	0.000	6536.474	0.000
179.	8829.700	-2.200	0.000	0.000	6532.465	4.020	0.000	6536.474	0.000
180.	8826.732	0.000	0.000	0.000	6536.474	-0.000	0.000	6536.474	0.000

111-PLANE SPINEL

	LNVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
0.	10151.051	0.000	0.000	6536.474	0.000	0.000	4194.383	0.000	-0.000
1.	10151.304	.160	.600	6535.141	-1.340	-.950	4195.850	2.290	-1.230
2.	10152.057	.320	1.200	6531.147	-2.670	-1.850	4200.242	4.560	-2.440
3.	10153.303	.460	1.800	6524.513	-3.950	-2.830	4207.536	6.740	-3.650
4.	10155.025	.630	2.300	6515.270	-5.290	-3.760	4217.691	8.930	-4.820
5.	10157.200	.770	2.960	6503.465	-6.570	-4.670	4230.652	10.990	-5.960
6.	10159.803	.910	3.560	6489.135	-7.810	-5.560	4246.348	12.950	-7.070
7.	10162.799	1.030	4.070	6472.411	-9.020	-6.460	4264.692	14.760	-8.130
8.	10166.153	1.140	4.600	6453.317	-10.150	-7.330	4285.583	16.460	-9.130
9.	10169.823	1.230	5.110	6431.969	-11.300	-8.170	4308.904	18.040	-10.060
10.	10173.765	1.310	5.600	6408.478	-12.370	-8.990	4334.924	19.450	-10.940
11.	10177.932	1.370	6.070	6382.987	-13.370	-9.790	4362.235	20.720	-11.810
12.	10182.276	1.420	6.510	6355.573	-14.310	-10.570	4392.055	21.820	-12.590
13.	10186.746	1.460	6.940	6326.450	-15.170	-11.320	4423.623	22.770	-13.260
14.	10191.291	1.470	7.340	6295.787	-15.950	-12.040	4456.803	23.560	-13.920
15.	10195.861	1.450	7.710	6263.715	-16.640	-12.730	4491.377	24.180	-14.500
16.	10200.406	1.400	8.060	6230.596	-17.220	-13.400	4527.107	24.630	-15.010
17.	10204.877	1.420	8.390	6196.376	-17.690	-14.040	4563.726	24.900	-15.450
18.	10209.226	1.370	8.690	6161.595	-18.030	-14.650	4600.939	24.980	-15.840
19.	10213.408	1.310	8.960	6126.466	-18.220	-15.230	4638.915	24.850	-16.180
20.	10217.380	1.240	9.210	6091.361	-18.160	-15.760	4675.779	24.490	-16.430
21.	10221.101	1.150	9.440	6056.621	-18.010	-16.310	4712.603	23.870	-16.590
22.	10224.534	1.050	9.640	6022.773	-17.550	-16.800	4748.400	22.560	-16.800
23.	10227.646	.940	9.820	5990.332	-16.790	-17.260	4782.611	21.700	-16.910
24.	10230.406	.830	9.970	5959.915	-15.970	-17.680	4814.603	20.040	-16.970
25.	10232.787	.700	10.100	5932.215	-14.140	-18.060	4843.665	17.520	-16.900
26.	10234.766	.570	10.200	5907.932	-12.160	-18.390	4869.676	15.220	-16.810
27.	10236.326	.430	10.260	5886.034	-9.700	-18.660	4891.023	12.130	-16.700
28.	10237.450	.250	10.340	5863.104	-6.760	-18.850	4905.452	8.440	-16.570
29.	10238.129	.150	10.380	5863.849	0.000	-18.950	4915.097	4.340	-16.440
30.	10238.356	-0.000	10.390	5860.712	3.490	-19.030	4918.364	0.000	-16.300
31.	10238.125	-.150	10.380	5853.849	6.760	-19.060	4915.097	-4.340	-16.190
32.	10237.450	-.290	10.340	5843.104	9.700	-19.660	4905.452	-8.440	-16.000
33.	10236.326	-.430	10.260	5830.034	12.160	-19.850	4891.023	-12.130	-15.810
34.	10234.766	-.570	10.200	5807.932	14.140	-19.660	4869.676	-15.220	-15.600
35.	10232.787	-.700	10.100	5932.215	16.790	-17.680	4843.665	-17.520	-15.450
36.	10230.406	-.830	9.970	5959.915	18.010	-16.800	4814.603	-20.040	-15.300
37.	10227.646	-.940	9.820	5990.332	18.220	-16.310	4782.612	-21.700	-15.100
38.	10224.534	-1.050	9.640	6022.773	18.160	-15.760	4748.400	-22.560	-14.800
39.	10221.101	-1.150	9.440	6056.621	18.030	-15.230	4712.603	-23.870	-14.640
40.	10217.379	-1.240	9.210	6091.361	18.220	-14.650	4675.779	-24.490	-14.430
41.	10213.408	-1.310	8.960	6126.466	18.160	-14.040	4638.915	-24.630	-14.180
42.	10209.226	-1.370	8.690	6161.595	18.010	-13.400	4600.939	-24.900	-13.840
43.	10204.877	-1.420	8.390	6196.376	17.550	-12.730	4563.726	-24.980	-13.450
44.	10200.406	-1.460	8.060	6230.596	16.640	-12.040	4527.107	-24.560	-13.010
45.	10195.861	-1.470	7.710	6263.715	15.950	-11.320	4491.377	-23.560	-12.590
46.	10191.291	-1.450	7.340	6295.786	15.170	-10.570	4456.803	-22.770	-12.260
47.	10186.746	-1.420	6.940	6326.450	14.310	-9.790	4423.623	-21.820	-11.810
48.	10182.276	-1.400	6.510	6355.573	13.370	-9.020	4392.055	-20.720	-11.450
49.	10177.932	-1.370	6.070	6382.967			4362.295		

111-PLANE SPINEL

BULK

	LNGVEL	LPH112	LPH113	FSRVEL	FSPH112	FSPH113	SSRVEL	SSPH112	SSPH113
50.	10173.765	-1.310	5.000	6408.478	12.370	-6.990	4334.524	-19.450	-10.550
51.	10169.823	-1.230	5.110	6431.969	11.300	-8.170	4308.905	-18.040	-10.080
52.	10166.153	-1.140	4.800	6453.317	10.190	-7.330	4287.583	-16.460	-9.130
53.	10162.798	-1.030	4.070	6472.411	9.020	-6.460	4264.692	-14.780	-8.130
54.	10159.803	-0.910	3.520	6488.155	7.810	-5.580	4246.346	-12.950	-7.070
55.	10157.200	-0.770	2.960	6503.465	6.570	-4.670	4230.652	-10.990	-5.960
56.	10155.025	-0.630	2.380	6515.270	5.290	-3.760	4217.691	-8.530	-4.820
57.	10153.303	-0.480	1.800	6524.513	3.990	-2.830	4207.536	-6.760	-3.650
58.	10152.057	-0.320	1.200	6531.517	2.670	-1.890	4200.242	-4.560	-2.440
59.	10151.304	-0.160	0.600	6535.141	1.340	-0.950	4195.050	-2.250	-1.230
60.	10151.051	0.000	0.000	6536.474	-0.000	0.000	4194.383	-0.000	-0.000
61.	10151.304	0.160	-0.600	6535.141	-1.340	0.950	4194.383	-2.250	-1.230
62.	10152.056	0.320	-1.200	6531.517	-2.670	1.890	4200.242	-4.560	-2.440
63.	10153.303	0.480	-1.800	6524.513	-3.990	2.830	4207.536	-6.760	-3.650
64.	10155.025	0.630	-2.380	6515.270	-5.290	3.760	4217.691	-8.530	-4.820
65.	10157.201	0.770	-2.960	6503.465	-6.570	4.670	4230.652	-10.990	-5.960
66.	10159.803	0.910	-3.520	6488.155	-7.810	5.580	4246.346	-12.950	-7.070
67.	10162.800	1.030	-4.070	6472.411	-9.020	6.460	4264.692	-14.780	-8.130
68.	10166.153	1.140	-4.800	6453.317	-10.190	7.330	4287.583	-16.460	-9.130
69.	10169.823	1.230	-5.110	6431.969	-11.300	8.170	4308.905	-18.040	-10.080
70.	10173.765	1.310	-5.600	6408.478	-12.370	8.990	4334.524	-19.450	-10.550
71.	10177.932	1.370	-6.070	6382.967	-13.370	9.750	4362.295	-20.720	-11.610
72.	10182.276	1.420	-6.510	6355.573	-14.310	10.570	4392.054	-21.820	-12.580
73.	10186.746	1.460	-6.940	6326.449	-15.170	11.320	4423.623	-22.770	-13.520
74.	10191.291	1.470	-7.340	6295.767	-15.950	12.040	4456.803	-23.560	-14.350
75.	10195.862	1.470	-7.710	6263.715	-16.640	12.730	4491.377	-24.180	-15.090
76.	10200.407	1.450	-8.060	6230.506	-17.220	13.400	4527.106	-24.630	-15.710
77.	10204.877	1.420	-8.390	6196.376	-17.690	14.040	4563.726	-24.900	-16.250
78.	10209.226	1.370	-8.690	6161.594	-18.030	14.650	4600.934	-25.000	-16.700
79.	10213.406	1.310	-8.960	6126.466	-18.220	15.230	4638.415	-24.950	-17.110
80.	10217.380	1.240	-9.210	6091.341	-18.220	15.760	4675.779	-24.490	-17.450
81.	10221.101	1.150	-9.440	6056.621	-18.010	16.310	4712.603	-23.870	-17.640
82.	10224.534	1.050	-9.640	6022.772	-17.550	16.800	4749.400	-22.960	-17.700
83.	10227.646	0.940	-9.820	5990.332	-16.790	17.260	4782.611	-21.700	-17.510
84.	10230.406	0.830	-9.970	5959.915	-15.670	17.660	4814.603	-20.440	-17.150
85.	10232.767	0.700	-10.100	5932.215	-14.140	18.030	4843.864	-19.220	-16.600
86.	10234.767	0.570	-10.200	5907.991	-12.160	18.390	4869.023	-17.920	-16.000
87.	10236.326	0.430	-10.260	5886.033	-9.700	18.660	4894.075	-16.350	-15.350
88.	10237.451	0.290	-10.340	5863.103	-6.760	18.860	4915.096	-14.340	-14.590
89.	10238.129	0.150	-10.360	5833.849	0.000	19.030	4938.364	-12.130	-13.750
90.	10238.356	0.000	-10.390	5800.712	0.000	19.030	4955.096	-9.800	-12.850
91.	10238.129	-0.150	-10.360	5763.849	3.440	18.950	4968.096	-7.340	-11.900
92.	10237.451	-0.290	-10.340	5733.103	6.700	18.660	4975.452	-4.340	-10.950
93.	10236.326	-0.430	-10.260	5698.033	9.700	18.390	4984.075	-1.230	-9.950
94.	10234.767	-0.570	-10.200	5663.991	12.160	18.030	4989.023	1.230	-8.950
95.	10232.767	-0.700	-10.100	5622.772	14.140	17.660	4994.075	4.340	-7.950
96.	10230.406	-0.830	-9.970	5599.915	15.670	17.260	4998.096	7.340	-6.950
97.	10227.646	-0.940	-9.820	5590.332	16.790	16.800	4998.096	10.440	-5.950
98.	10224.534	-1.050	-9.640	6022.772	17.550	16.310	4998.096	13.520	-4.950
99.	10221.101	-1.150	-9.440	6056.621	18.010	16.310	4998.096	16.600	-3.950

111-PLANE SPINEL

	LNVEL	LP112	LP113	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	10217.380	-1.240	-9.210	6091.341	18.220	15.780	4675.773	-24.450	16.430
101.	10213.406	-1.310	-8.960	6126.466	18.220	15.230	4630.415	-24.450	16.100
102.	10209.226	-1.370	-8.690	6161.594	18.030	14.650	4600.939	-24.900	15.840
103.	10204.877	-1.420	-8.390	6196.376	17.690	14.040	4563.726	-24.900	15.450
104.	10200.407	-1.450	-8.060	6230.506	17.220	13.400	4527.106	-24.630	15.010
105.	10195.862	-1.470	-7.710	6263.715	16.640	12.730	4491.377	-24.150	14.500
106.	10191.291	-1.470	-7.340	6295.767	15.950	12.040	4456.003	-23.580	13.920
107.	10186.746	-1.460	-6.940	6326.449	15.170	11.320	4423.623	-22.770	13.280
108.	10182.276	-1.420	-6.510	6355.573	14.310	10.570	4392.054	-21.620	12.500
109.	10177.932	-1.370	-6.070	6382.967	13.370	9.750	4362.295	-20.720	11.610
110.	10173.765	-1.310	-5.600	6408.478	12.370	8.950	4334.524	-19.450	10.940
111.	10169.823	-1.230	-5.110	6431.969	11.300	8.170	4308.904	-18.040	10.080
112.	10166.153	-1.140	-4.600	6453.317	10.190	7.330	4285.533	-16.480	9.130
113.	10162.800	-1.030	-4.070	6472.411	9.020	6.460	4264.692	-14.780	8.130
114.	10159.603	-910	-3.520	6489.155	7.610	5.560	4246.368	-12.950	7.000
115.	10157.201	-770	-2.960	6503.465	6.070	4.670	4230.652	-10.990	5.900
116.	10155.025	-630	-2.380	6515.270	5.290	3.760	4217.691	-8.930	4.820
117.	10153.303	-460	-1.800	6524.513	3.950	2.830	4207.536	-6.780	3.620
118.	10152.058	-320	-1.200	6531.147	2.670	1.890	4200.242	-4.560	2.400
119.	10151.304	-160	0.000	6535.141	1.340	0.950	4195.050	-2.250	1.230
120.	10151.051	-0.000	0.000	6536.474	0.000	0.000	4194.383	0.000	0.000
121.	10151.304	160	1.200	6535.141	-1.340	-0.950	4195.050	2.250	-1.230
122.	10152.057	320	1.800	6531.147	-2.670	-1.890	4200.242	4.560	-2.400
123.	10153.303	460	2.380	6524.513	-3.950	-2.830	4207.536	6.780	-3.620
124.	10155.025	630	2.960	6515.270	-5.290	-3.760	4217.691	8.930	-4.820
125.	10157.201	770	3.520	6503.465	-6.570	-4.670	4230.652	10.990	-5.900
126.	10159.603	910	4.070	6489.155	-7.610	-5.560	4246.368	12.950	-7.000
127.	10162.800	1.030	4.600	6472.411	-9.020	-6.460	4264.692	14.780	-8.130
128.	10166.153	1.140	5.110	6453.317	-10.190	-7.330	4285.533	16.480	-9.130
129.	10169.823	1.230	5.600	6431.969	-11.300	-8.170	4308.904	18.040	-10.080
130.	10173.765	1.310	6.070	6408.478	-12.370	-8.950	4334.524	19.450	-10.940
131.	10177.932	1.370	6.510	6382.967	-13.370	-9.750	4362.295	20.720	-11.610
132.	10182.276	1.420	6.940	6355.573	-14.310	-10.570	4392.054	21.620	-12.500
133.	10186.745	1.470	7.340	6326.450	-15.170	-11.320	4423.623	22.770	-13.280
134.	10191.291	1.470	7.710	6295.766	-15.950	-12.040	4456.003	23.580	-14.000
135.	10195.861	1.450	8.060	6263.716	-16.640	-12.730	4491.377	24.150	-14.700
136.	10200.406	1.420	8.390	6230.506	-17.220	-13.400	4527.106	24.630	-15.010
137.	10204.877	1.420	8.690	6196.376	-17.690	-14.040	4563.726	24.900	-15.450
138.	10209.226	1.370	8.960	6161.595	-18.030	-14.650	4600.939	24.900	-15.840
139.	10213.406	1.310	9.210	6126.466	-18.220	-15.230	4630.415	24.650	-16.100
140.	10217.379	1.240	9.440	6091.341	-18.220	-15.760	4675.773	24.450	-16.430
141.	10221.101	1.150	9.640	6056.621	-18.010	-16.310	4715.603	23.870	-16.800
142.	10224.534	1.050	9.820	6022.773	-17.550	-16.860	4748.400	22.950	-17.100
143.	10227.646	940	9.640	5990.332	-16.790	-17.260	4782.612	21.700	-17.410
144.	10230.405	830	9.970	5959.915	-15.670	-17.680	4814.603	20.640	-17.690
145.	10232.787	700	10.100	5932.215	-14.140	-18.160	4843.665	19.520	-17.900
146.	10234.766	570	10.200	5907.992	-12.160	-18.390	4869.023	18.230	-18.010
147.	10236.326	430	10.240	5880.934	-9.700	-18.660	4893.876	16.130	-18.930
148.	10237.450	290	10.340	5873.104	-6.780	-18.160	4905.452	9.440	-18.970
149.	10238.125	150	10.380	5863.649	-3.490	-18.950	4915.097	4.340	-19.940

BULK

111-PLANE SPINEL

BULK

	LNGVEL	LPHI12	LPHI13	FSPVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
150.	10230.356	0.000	10.390	5860.712	-0.000	-19.630	4310.364	-0.000	-10.940
151.	10230.129	-0.150	10.380	5863.649	3.490	-18.550	4315.097	-4.340	-16.920
152.	10237.450	-0.290	10.340	5873.104	6.780	-16.860	4305.452	-8.440	-16.970
153.	10236.326	-0.430	10.260	5880.034	9.700	-18.660	4285.076	-12.130	-16.970
154.	10234.766	-0.570	10.200	5887.592	12.160	-18.350	4269.023	-15.250	-17.010
155.	10232.787	-0.700	10.100	5892.215	14.140	-18.060	4243.665	-17.920	-17.000
156.	10230.406	-0.830	9.970	5899.915	15.676	-17.660	4214.603	-20.040	-16.970
157.	10227.646	-0.940	9.820	5900.332	16.790	-17.260	4182.611	-21.700	-16.970
158.	10224.534	-1.050	9.640	6022.773	17.550	-16.600	4146.400	-22.900	-16.840
159.	10221.101	-1.150	9.440	6056.621	18.010	-16.310	4112.603	-23.870	-16.840
160.	10217.380	-1.240	9.210	6091.341	18.220	-15.760	4075.773	-24.490	-16.430
161.	10213.408	-1.310	8.960	6126.466	18.220	-15.230	4030.415	-24.850	-16.160
162.	10209.226	-1.370	8.690	6161.595	18.036	-14.610	3985.739	-24.900	-15.840
163.	10204.877	-1.420	8.390	6196.376	17.650	-14.040	3943.126	-24.500	-15.450
164.	10200.406	-1.450	8.060	6230.506	17.220	-13.400	3897.107	-24.630	-15.010
165.	10195.861	-1.470	7.710	6263.716	16.640	-12.730	3848.377	-24.100	-14.500
166.	10191.291	-1.470	7.340	6295.767	15.550	-12.040	3796.003	-23.500	-13.920
167.	10186.746	-1.460	6.940	6326.450	15.176	-11.320	3743.623	-22.710	-13.240
168.	10182.276	-1.420	6.510	6355.573	14.310	-10.570	3692.055	-21.850	-12.500
169.	10177.932	-1.370	6.070	6382.967	13.370	-9.750	3642.295	-20.720	-11.610
170.	10173.765	-1.310	5.600	6408.476	12.370	-8.950	3594.524	-19.450	-10.570
171.	10169.023	-1.230	5.110	6431.969	11.300	-8.170	3548.904	-18.040	-9.410
172.	10164.153	-1.140	4.600	6453.317	10.190	-7.330	3505.583	-16.490	-8.130
173.	10162.799	-1.030	4.070	6472.411	9.020	-6.460	3464.692	-14.760	-6.700
174.	10159.603	-0.910	3.520	6499.155	7.610	-5.560	3426.346	-12.950	-5.260
175.	10157.200	-0.770	2.960	6503.465	6.570	-4.670	3390.652	-10.990	-3.900
176.	10155.025	-0.630	2.380	6515.270	5.290	-3.760	3357.691	-8.530	-2.620
177.	10153.303	-0.480	1.800	6524.513	3.990	-2.830	3327.536	-6.700	-1.360
178.	10152.057	-0.320	1.200	6531.147	2.670	-1.890	3299.242	-4.560	-0.040
179.	10151.304	-0.160	0.600	6535.141	1.340	-0.950	3273.050	-2.290	1.230
180.	10151.051	0.000	-0.000	6536.474	-0.000	0.600	3249.303	0.600	0.600

110-PLANE SPINEL

BULK

	LNQVEL	LPN112	LPN113	FSRVEL	FSPN112	FSPN113	SSRVEL	SSPN112	SSPN113
0.	10555.633	0.000	0.000	5096.132	-24.520	0.000	5096.100	24.520	0.000
1.	10554.851	-4.50	-0.000	5056.783	-23.340	0.000	5136.756	24.520	0.000
2.	10552.481	-9.50	-0.000	5020.006	-22.020	-0.000	5177.537	24.310	0.000
3.	10548.493	-14.90	-0.000	4985.969	-20.540	0.000	5216.390	24.170	0.000
4.	10542.863	-2.010	-0.000	4954.632	-18.920	0.000	5259.265	24.000	0.000
5.	10535.588	-2.530	-0.000	4926.745	-17.140	-0.000	5300.112	23.610	-0.000
6.	10526.586	-3.060	-0.000	4901.847	-15.210	0.000	5340.883	23.600	0.000
7.	10515.908	-3.600	0.000	4880.266	-13.140	-0.000	5381.524	23.300	0.000
8.	10503.515	-4.130	-0.000	4862.121	-10.940	0.000	5422.006	23.110	0.000
9.	10489.400	-4.680	-0.000	4847.506	-8.610	-0.000	5462.267	22.630	0.000
10.	10473.556	-5.220	-0.000	4836.512	-6.140	-0.000	5502.270	22.540	0.000
11.	10455.980	-5.770	0.000	4829.206	-3.690	-0.000	5541.971	22.230	0.000
12.	10436.671	-6.320	-0.000	4825.644	-1.140	0.000	5581.329	21.910	0.000
13.	10415.633	-6.870	-0.000	4825.863	1.440	0.000	5620.305	21.570	-0.000
14.	10392.871	-7.420	-0.000	4829.881	4.020	0.000	5656.657	21.210	0.000
15.	10368.394	-7.970	-0.000	4837.700	6.560	-0.000	5696.950	20.640	0.000
16.	10342.215	-8.520	-0.000	4849.306	9.060	-0.000	5734.546	20.460	0.000
17.	10314.347	-9.060	0.000	4864.664	11.460	-0.000	5771.609	20.060	0.000
18.	10284.811	-9.600	0.000	4883.725	13.770	-0.000	5806.106	19.650	0.000
19.	10253.627	-10.140	-0.000	4906.422	15.960	-0.000	5844.001	19.230	0.000
20.	10220.822	-10.670	-0.000	4932.671	18.010	-0.000	5873.204	18.600	0.000
21.	10186.425	-11.150	0.000	4962.375	19.930	-0.000	5913.863	18.360	-0.000
22.	10150.469	-11.710	-0.000	4995.422	21.690	0.000	5947.767	17.910	0.000
23.	10112.992	-12.220	-0.000	5031.684	23.300	-0.000	5984.546	17.450	0.000
24.	10074.036	-12.720	-0.000	5071.024	24.760	-0.000	6013.377	16.960	0.000
25.	10033.646	-13.200	-0.000	5113.291	26.080	-0.000	6045.027	16.500	0.000
26.	9991.080	-13.660	-0.000	5158.323	27.250	0.000	6075.273	16.010	0.000
27.	9948.789	-14.140	-0.000	5205.949	28.270	-0.000	6105.889	15.520	0.000
28.	9904.441	-14.560	0.000	5255.987	29.160	-0.000	6135.050	15.020	0.000
29.	9858.905	-15.000	-0.000	5308.246	29.910	-0.000	6163.335	14.510	0.000
30.	9812.261	-15.400	-0.000	5362.526	30.540	0.000	6190.720	13.990	0.000
31.	9764.595	-15.760	0.000	5418.624	31.050	-0.000	6217.185	13.470	0.000
32.	9716.005	-16.120	-0.000	5476.316	31.430	-0.000	6242.706	12.950	0.000
33.	9666.595	-16.440	-0.000	5535.381	31.700	-0.000	6267.271	12.410	0.000
34.	9616.486	-16.720	0.000	5595.581	31.860	-0.000	6290.825	11.860	0.000
35.	9565.809	-16.960	-0.000	5656.671	31.900	-0.000	6313.443	11.330	-0.000
36.	9514.711	-17.150	0.000	5718.394	31.830	-0.000	6335.017	10.790	0.000
37.	9463.355	-17.290	0.000	5780.479	31.640	-0.000	6355.563	10.230	0.000
38.	9411.923	-17.380	0.000	5842.641	31.340	-0.000	6375.064	9.660	0.000
39.	9360.620	-17.390	0.000	5904.579	30.920	0.000	6393.507	9.120	0.000
40.	9309.673	-17.330	0.000	5965.972	30.370	-0.000	6410.879	8.550	-0.000
41.	9259.334	-17.170	0.000	6026.476	29.660	-0.000	6427.167	7.990	0.000
42.	9209.888	-16.920	0.000	6085.734	28.840	-0.000	6442.359	7.420	0.000
43.	9161.848	-16.550	0.000	6143.346	27.850	0.000	6456.446	6.850	0.000
44.	9114.961	-16.060	0.000	6198.898	26.680	0.000	6469.416	6.270	0.000
45.	9070.207	-15.420	0.000	6251.941	25.320	-0.000	6481.262	5.690	-0.000
46.	9027.804	-14.610	0.000	6302.001	23.750	-0.000	6491.975	5.120	0.000
47.	8988.194	-13.640	0.000	6348.579	21.950	-0.000	6501.246	4.530	0.000
48.	8951.849	-12.470	0.000	6391.155	19.910	-0.000	6509.371	3.950	0.000
49.	8919.254	-11.110	0.000	6429.203	17.610	-0.000	6517.242	3.370	-0.000

110-PLANE SPINEL

BULK

	LNGVEL	LPMI12	LPMI13	FSRVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13
50.	8998.893	-9.540	0.000	6462.201	15.040	-0.000	6523.356	2.780	0.000
51.	8967.233	-7.790	0.000	6469.651	12.220	0.000	6520.317	2.200	0.000
52.	8948.598	-5.660	0.000	6511.106	9.160	-0.000	6532.042	1.610	0.000
53.	8935.846	-3.790	0.000	6526.188	5.910	-0.000	6534.710	1.020	0.000
54.	8928.341	-1.620	0.000	6534.618	2.530	-0.000	6536.157	.430	-0.000
55.	8926.935	.560	0.000	6536.433	-.160	0.000	6536.235	-.510	-0.000
56.	8931.470	2.760	0.000	6531.008	-4.330	-0.000	6535.539	-.740	0.000
57.	8941.836	4.900	0.000	6519.036	-7.650	-0.000	6533.473	-1.330	0.000
58.	8957.822	6.900	0.000	6500.550	-10.460	-0.000	6530.239	-1.920	0.000
59.	8979.113	8.740	0.000	6475.870	-13.740	-0.000	6525.036	-2.510	0.000
60.	8995.311	10.390	0.000	6445.436	-16.430	-0.000	6520.272	-3.090	0.000
61.	8935.967	11.850	0.000	6409.710	-18.660	0.000	6513.567	-3.660	0.000
62.	8970.603	13.110	0.000	6369.206	-21.020	-0.000	6505.666	-4.260	-0.000
63.	9006.731	14.180	0.000	6324.451	-22.930	-0.000	6496.635	-4.840	0.000
64.	9049.674	15.060	0.000	6275.971	-24.610	0.000	6486.460	-5.420	0.000
65.	9093.571	15.770	0.000	6224.275	-26.070	-0.000	6475.148	-6.000	-0.000
66.	9135.355	16.340	0.000	6169.850	-27.320	-0.000	6462.708	-6.580	0.000
67.	9186.948	16.760	0.000	6113.156	-28.400	-0.000	6449.147	-7.150	0.000
68.	9235.866	17.070	0.000	6054.626	-29.300	-0.000	6434.475	-7.720	0.000
69.	9285.621	17.270	0.000	5994.663	-30.060	-0.000	6418.702	-8.290	0.000
70.	9336.514	17.370	0.000	5933.644	-30.670	-0.000	6401.841	-8.850	-0.000
71.	9387.679	17.390	0.000	5871.922	-31.160	0.000	6383.402	-9.410	0.000
72.	9439.076	17.340	0.000	5809.626	-31.520	-0.000	6364.086	-9.970	-0.000
73.	9490.492	17.230	0.000	5747.670	-31.760	-0.000	6344.044	-10.530	0.000
74.	9541.734	17.060	-0.000	5685.741	-31.860	-0.000	6323.173	-11.070	0.000
75.	9592.629	16.840	0.000	5624.320	-31.890	-0.000	6301.642	-11.620	-0.000
76.	9643.023	16.560	0.000	5563.666	-31.790	-0.000	6278.526	-12.160	0.000
77.	9692.776	16.260	0.000	5504.036	-31.570	-0.000	6254.423	-12.700	0.000
78.	9741.770	15.940	0.000	5445.664	-31.240	-0.000	6229.356	-13.230	0.000
79.	9789.865	15.560	0.000	5386.792	-30.800	-0.000	6203.327	-13.750	0.000
80.	9837.022	15.190	0.000	5333.626	-30.230	-0.000	6176.374	-14.270	0.000
81.	9883.091	14.780	0.000	5280.369	-29.530	-0.000	6146.511	-14.760	0.000
82.	9928.009	14.350	-0.000	5229.276	-28.710	-0.000	6119.761	-15.260	0.000
83.	9971.702	13.960	0.000	5180.490	-27.750	-0.000	6090.145	-15.780	0.000
84.	10014.102	13.430	-0.000	5134.212	-26.650	-0.000	6059.664	-16.270	0.000
85.	10055.146	12.950	0.000	5090.615	-25.400	-0.000	6028.444	-16.750	0.000
86.	10094.766	12.460	-0.000	5049.878	-24.020	0.000	5996.320	-17.230	0.000
87.	10132.967	11.950	0.000	5012.145	-22.470	-0.000	5963.250	-17.690	0.000
88.	10169.646	11.440	0.000	4977.564	-20.780	-0.000	5929.954	-18.150	0.000
89.	10204.783	10.920	-0.000	4946.266	-18.930	-0.000	5895.679	-18.590	0.000
90.	10238.343	10.350	-0.000	4918.374	-16.950	-0.000	5860.726	-19.030	0.000
91.	10270.296	9.650	0.000	4893.990	-14.820	-0.000	5825.125	-19.460	0.000
92.	10300.613	9.320	0.000	4873.203	-12.570	0.000	5788.908	-19.870	0.000
93.	10329.270	8.770	0.000	4856.890	-10.200	-0.000	5752.168	-20.270	0.000
94.	10356.249	8.230	0.000	4842.708	-7.750	-0.000	5714.706	-20.660	0.000
95.	10381.531	7.660	-0.000	4833.096	-5.230	0.000	5676.697	-21.040	0.000
96.	10405.184	7.130	-0.000	4827.285	-2.660	-0.000	5636.956	-21.400	0.000
97.	10426.957	6.560	0.000	4825.275	-.080	-0.000	5599.778	-21.750	0.000
98.	10447.862	6.030	0.000	4827.056	2.490	-0.000	5560.533	-22.060	0.000
99.	10465.476	5.460	-0.000	4832.600	5.020	-0.000	5521.049	-22.460	0.000

110-PLANE SPINEL

	LNGVEL	LPH112	LPH113	FSRVEL	FSPH112	FSPH113	SSRVEL	SSPH112	SSPH113
100.	10462.137	4.430	0.000	4441.861	7.480	-0.000	5481.183	-22.700	0.000
101.	10497.066	4.350	0.000	4454.777	9.850	-0.000	5441.039	-22.980	0.000
102.	10510.272	3.850	-0.000	4871.266	12.110	-0.000	5000.656	-23.240	0.000
103.	10521.760	3.310	0.000	4891.241	14.250	-0.000	5360.066	-23.490	0.000
104.	10531.540	2.760	-0.000	4914.566	16.250	-0.000	5319.366	-23.710	0.000
105.	10539.626	2.260	-0.000	4941.186	18.100	-0.000	5276.551	-23.910	0.000
106.	10546.042	1.740	0.000	4970.901	19.800	-0.000	5237.683	-24.090	0.000
107.	10550.802	1.230	0.000	5003.589	21.340	-0.000	5196.814	-24.250	0.000
108.	10553.932	.720	0.000	5039.093	22.740	-0.000	5155.942	-24.360	0.000
109.	10555.460	.230	0.000	5077.250	23.980	-0.000	5115.271	-24.460	0.000
110.	10555.417	-.250	0.000	5117.886	25.050	0.000	5074.702	-24.560	-0.000
111.	10553.835	-.730	-0.000	5160.824	26.050	0.000	5034.340	-24.610	-0.000
112.	10550.764	-1.180	0.000	5205.876	26.860	0.000	4994.236	-24.620	-0.000
113.	10546.236	-1.630	0.000	5252.654	27.570	0.000	4954.454	-24.610	-0.000
114.	10540.302	-2.060	0.000	5301.563	28.150	0.000	4915.043	-24.560	-0.000
115.	10533.014	-2.460	0.000	5351.805	28.610	0.000	4876.063	-24.480	-0.000
116.	10524.428	-2.870	-0.000	5403.377	28.950	0.000	4837.573	-24.380	-0.000
117.	10514.686	-3.250	0.000	5456.076	29.150	0.000	4799.632	-24.280	-0.000
118.	10503.613	-3.610	-0.000	5509.700	29.320	0.000	4762.300	-24.160	-0.000
119.	10491.523	-3.940	0.000	5564.036	29.360	0.000	4725.637	-23.760	0.000
120.	10478.411	-4.250	0.000	5618.876	29.300	0.000	4689.705	-23.470	0.000
121.	10464.360	-4.540	0.000	5674.010	29.140	0.000	4654.564	-23.140	0.000
122.	10449.460	-4.790	0.000	5729.226	28.890	0.000	4620.275	-22.770	0.000
123.	10433.805	-5.020	0.000	5784.310	28.560	0.000	4586.901	-22.340	0.000
124.	10417.496	-5.220	0.000	5839.040	28.130	0.000	4554.502	-21.860	0.000
125.	10400.640	-5.380	0.000	5893.223	27.620	0.000	4523.139	-21.330	0.000
126.	10383.352	-5.500	-0.000	5946.620	27.020	0.000	4492.072	-20.740	0.000
127.	10365.750	-5.560	0.000	5999.021	26.340	0.000	4463.762	-20.100	0.000
128.	10347.960	-5.640	0.000	6050.206	25.560	0.000	4435.666	-19.400	0.000
129.	10330.115	-5.650	-0.000	6099.959	24.700	0.000	4409.242	-18.650	0.000
130.	10312.350	-5.610	0.000	6148.060	23.740	0.000	4383.946	-17.830	0.000
131.	10294.806	-5.530	-0.000	6194.291	22.700	0.000	4360.032	-16.960	0.000
132.	10277.833	-5.460	0.000	6238.437	21.560	0.000	4337.552	-16.030	0.000
133.	10260.973	-5.320	0.000	6280.284	20.340	0.000	4316.556	-15.140	0.000
134.	10244.978	-4.960	0.000	6319.621	19.020	0.000	4297.092	-13.940	0.000
135.	10229.797	-4.710	0.000	6356.246	17.600	0.000	4279.204	-12.690	0.000
136.	10215.575	-4.390	-0.000	6389.961	16.100	0.000	4262.735	-11.730	0.000
137.	10202.457	-4.020	-0.000	6420.577	14.510	0.000	4248.322	-10.520	0.000
138.	10190.578	-3.610	-0.000	6447.920	12.840	0.000	4235.402	-9.270	0.000
139.	10180.066	-3.150	0.000	6471.826	11.090	0.000	4224.204	-7.570	0.000
140.	10171.038	-2.660	-0.000	6492.150	9.270	0.000	4214.757	-6.640	0.000
141.	10163.594	-2.140	0.000	6508.763	7.380	0.000	4207.084	-5.270	0.000
142.	10157.822	-1.590	0.000	6521.559	5.450	0.000	4201.204	-3.600	0.000
143.	10153.769	-1.020	-0.000	6530.454	3.460	0.000	4197.132	-2.470	0.000
144.	10151.545	-.830	-0.000	6535.391	1.460	0.000	4194.878	-1.650	0.000
145.	10151.115	.160	0.000	6536.335	-.530	-0.000	4194.447	.360	0.000
146.	10152.505	.740	0.000	6533.280	-2.540	-0.000	4195.841	1.600	0.000
147.	10155.690	1.320	0.000	6526.240	-4.520	-0.000	4194.056	3.220	0.000
148.	10160.657	1.860	0.000	6515.284	-6.460	0.000	4204.044	4.620	0.000
149.	10167.321	2.420	0.000	6500.460	-8.360	-0.000	4210.513	6.000	0.000

BULK

	110-PLANE SPINEL				BULK			
	LNVEL	LPHI12	LPHI13	FSPVEL	FSPH12	FSPH13	SSRVEL	SSPH12
150.	10175.613	2.930	0.000	6481.874	-10.240	0.000	423.526	7.350
151.	10185.439	3.400	0.000	6459.641	-12.020	-0.000	4229.900	6.660
152.	10196.686	3.630	0.000	6433.901	-13.730	0.000	4242.011	5.940
153.	10209.238	4.220	0.000	6404.809	-15.360	-0.000	4255.629	11.170
154.	10222.956	4.570	0.000	6372.534	-16.910	0.000	4271.321	12.350
155.	10237.702	4.670	0.000	6337.258	-18.360	-0.000	4288.450	13.470
156.	10253.332	5.120	0.000	6294.176	-19.730	0.000	4307.175	14.550
157.	10269.696	5.350	0.000	6258.488	-21.000	-0.000	4327.454	15.570
158.	10286.647	5.470	0.000	6215.401	-22.160	-0.000	4349.239	16.530
159.	10304.034	5.760	0.000	6170.127	-23.260	-0.000	4372.483	17.430
160.	10321.711	5.630	0.000	6122.882	-24.260	-0.000	4397.133	18.270
161.	10339.536	5.650	0.000	6073.882	-25.160	-0.000	4423.136	19.050
162.	10357.369	5.620	0.000	6023.365	-25.980	-0.000	4450.440	19.760
163.	10375.075	5.550	0.000	5971.491	-26.710	-0.000	4478.205	20.450
164.	10392.527	5.440	0.000	5918.537	-27.350	0.000	4506.713	21.600
165.	10409.601	5.300	0.000	5864.702	-27.900	-0.000	4539.566	21.620
166.	10426.182	5.120	0.000	5810.203	-28.370	-0.000	4571.483	22.120
167.	10442.159	4.900	0.000	5755.255	-28.750	-0.000	4604.405	22.570
168.	10457.427	4.660	0.000	5700.075	-29.040	-0.000	4638.269	22.970
169.	10471.890	4.390	0.000	5644.876	-29.230	-0.000	4673.016	23.320
170.	10485.456	4.090	0.000	5589.870	-29.340	-0.000	4706.562	23.630
171.	10498.039	3.770	0.000	5535.270	-29.350	-0.000	4744.708	23.690
172.	10509.555	3.420	0.000	5481.265	-29.260	-0.000	4781.932	24.110
173.	10519.942	3.050	0.000	5428.124	-29.080	-0.000	4819.593	24.290
174.	10529.120	2.660	0.000	5375.994	-28.760	0.000	4857.631	24.430
175.	10537.026	2.260	0.000	5325.094	-28.360	0.000	4896.567	24.530
176.	10543.607	1.840	-0.306	5275.641	-27.860	-0.000	4935.002	24.590
177.	10548.805	1.400	-0.000	5227.822	-27.220	0.000	4975.417	24.620
178.	10552.571	.940	0.000	5181.836	-26.460	0.000	5015.376	24.620
179.	10554.461	.400	-0.000	5137.877	-25.560	-0.000	5055.022	24.590
180.	10555.633	0.000	-0.000	5096.132	-24.520	-0.000	5096.100	24.520

X-PLANE (YZ-PLANE) TELLURIUM DIOXIDE

BULK

	LMGVEL	LPN12	LPN13	FSPVEL	FSPN12	FSPN13	SSRVEL	SSPN12	SSPN13
0.	3316.876	-8.000	-0.000	3049.599	0.000	0.000	2103.340	0.000	-0.000
1.	3316.576	-6.000	-0.000	3049.621	1.910	0.000	2103.333	-0.020	0.000
2.	3315.676	-1.200	-0.000	3051.088	1.620	0.000	2103.312	-0.000	0.000
3.	3314.175	-1.700	-0.000	3053.197	2.720	0.000	2103.276	-0.670	0.000
4.	3312.076	-2.300	-0.000	3056.142	3.610	0.000	2103.227	-0.090	0.000
5.	3309.580	-2.370	-0.000	3059.919	4.490	0.000	2103.165	-1.110	0.000
6.	3306.868	-3.560	-0.000	3064.518	5.350	0.000	2103.090	-1.130	0.000
7.	3302.203	-4.150	-0.000	3069.929	6.190	0.000	2103.004	-1.140	0.000
8.	3297.727	-4.740	-0.000	3076.143	7.020	0.000	2102.907	-1.160	0.000
9.	3292.863	-5.330	-0.000	3083.145	7.820	0.000	2102.801	-1.170	0.000
10.	3287.814	-5.910	-0.000	3090.920	8.600	0.000	2102.686	-1.190	0.000
11.	3280.784	-6.460	-0.000	3099.454	9.350	0.000	2102.563	-1.200	0.000
12.	3273.976	-7.000	-0.000	3108.729	10.070	0.000	2102.434	-1.210	0.000
13.	3266.600	-7.650	-0.000	3118.725	10.770	0.000	2102.300	-1.210	0.000
14.	3258.855	-8.230	-0.000	3129.424	11.430	0.000	2102.162	-1.220	0.000
15.	3250.146	-8.800	-0.000	3140.805	12.060	0.000	2102.021	-1.220	0.000
16.	3241.065	-9.370	-0.000	3152.846	12.660	0.000	2101.879	-1.220	0.000
17.	3231.472	-9.940	-0.000	3165.523	13.230	0.000	2101.736	-1.220	0.000
18.	3221.317	-10.500	-0.000	3178.814	13.760	0.000	2101.594	-1.220	0.000
19.	3210.625	-11.060	-0.000	3192.694	14.260	0.000	2101.454	-1.220	0.000
20.	3199.405	-11.620	-0.000	3207.139	14.730	0.000	2101.316	-1.210	0.000
21.	3187.665	-12.170	-0.000	3222.121	15.170	0.000	2101.182	-1.210	0.000
22.	3175.413	-12.720	-0.000	3237.617	15.570	0.000	2101.053	-1.200	0.000
23.	3162.658	-13.260	-0.000	3253.596	15.940	0.000	2100.926	-1.190	0.000
24.	3149.408	-13.790	-0.000	3270.039	16.270	0.000	2100.810	-1.180	0.000
25.	3135.675	-14.320	-0.000	3286.912	16.580	0.000	2100.698	-1.170	0.000
26.	3121.468	-14.850	-0.000	3304.190	16.850	0.000	2100.594	-1.160	0.000
27.	3106.799	-15.360	-0.000	3321.845	17.100	0.000	2100.496	-1.150	0.000
28.	3091.677	-15.870	-0.000	3339.851	17.310	0.000	2100.407	-1.130	0.000
29.	3076.115	-16.360	-0.000	3358.179	17.500	0.000	2100.326	-1.120	0.000
30.	3060.126	-16.870	-0.000	3376.802	17.660	0.000	2100.253	-1.110	0.000
31.	3043.721	-17.360	-0.000	3395.693	17.790	0.000	2100.189	-1.090	0.000
32.	3026.914	-17.840	-0.000	3414.824	17.890	0.000	2100.134	-1.080	0.000
33.	3009.720	-18.310	-0.000	3434.169	17.970	0.000	2100.087	-1.070	0.000
34.	2992.151	-18.770	-0.000	3453.780	18.030	0.000	2100.049	-1.050	0.000
35.	2974.223	-19.220	-0.000	3473.590	18.060	0.000	2100.020	-1.040	0.000
36.	2955.952	-19.670	-0.000	3493.514	18.060	0.000	2100.000	-1.030	0.000
37.	2937.353	-20.100	-0.000	3513.445	18.040	0.000	2099.986	-1.010	0.000
38.	2918.443	-20.520	-0.000	3533.357	18.010	0.000	2099.984	0.000	0.000
39.	2899.239	-20.920	-0.000	3553.225	17.950	0.000	2099.989	0.010	0.000
40.	2879.759	-21.320	-0.000	3573.024	17.870	0.000	2099.001	0.030	0.000
41.	2860.026	-21.700	-0.000	3592.749	17.770	0.000	2100.022	0.040	0.000
42.	2840.043	-22.060	-0.000	3612.316	17.650	0.000	2100.049	0.050	0.000
43.	2819.865	-22.420	-0.000	3631.562	17.520	0.000	2100.084	0.060	0.000
44.	2799.448	-22.750	0.000	3650.542	17.360	0.000	2100.125	0.070	0.000
45.	2778.872	-23.070	0.000	3669.343	17.200	0.000	2100.173	0.080	0.000
46.	2758.138	-23.370	0.000	3687.915	17.010	0.000	2100.227	0.090	0.000
47.	2737.268	-23.660	0.000	3706.264	16.810	0.000	2100.287	0.100	0.000
48.	2716.286	-23.920	0.000	3724.358	16.590	0.000	2100.352	0.110	0.000
49.	2695.214	-24.170	0.000	3751.678	16.360	0.000	2100.422	0.110	0.000

X-PLANE (YZ-PLANE) TELLURIUM DIOXIDE

	LPM12	LPM13	FSRWEL	FSPM12	FSPM13	SSRWEL	SSPM12	SSPM13
50.	2674.876	0.000	3770.802	16.120	0.000	2100.496	.120	-0.000
51.	2652.696	-24.390	3789.711	15.860	0.000	2100.575	.130	-0.000
52.	2631.703	-24.770	3808.384	15.590	0.000	2100.657	.130	-0.000
53.	2610.518	-24.920	3826.804	15.310	0.000	2100.733	.140	-0.000
54.	2589.369	-25.050	3844.950	15.020	0.000	2100.833	.140	-0.000
55.	2568.284	-25.150	3862.807	14.710	0.000	2100.924	.150	-0.000
56.	2547.290	-25.220	3880.355	14.400	0.000	2101.018	.150	-0.000
57.	2526.416	-25.260	3897.579	14.080	0.000	2101.114	.150	-0.000
58.	2505.691	-25.270	3914.461	13.740	0.000	2101.212	.150	-0.000
59.	2485.143	-25.240	3930.986	13.400	0.000	2101.310	.150	-0.000
60.	2464.803	-25.180	3947.139	13.040	0.000	2101.410	.160	-0.000
61.	2444.702	-25.080	3962.904	12.660	0.000	2101.509	.160	-0.000
62.	2424.870	-24.950	3978.267	12.310	0.000	2101.609	.160	-0.000
63.	2405.339	-24.770	3993.214	11.940	0.000	2101.709	.160	-0.000
64.	2386.141	-24.550	4007.733	11.550	0.000	2101.808	.150	-0.000
65.	2367.307	-24.260	4021.809	11.160	0.000	2101.906	.150	-0.000
66.	2348.869	-23.970	4035.432	10.770	0.000	2102.003	.150	-0.000
67.	2330.861	-23.610	4048.588	10.360	0.000	2102.099	.150	-0.000
68.	2313.314	-23.200	4061.267	9.950	0.000	2102.192	.140	-0.000
69.	2296.261	-22.740	4073.457	9.540	0.000	2102.284	.140	-0.000
70.	2279.734	-22.220	4085.149	9.110	0.000	2102.373	.140	-0.000
71.	2263.765	-21.640	4096.333	8.690	0.000	2102.459	.130	-0.000
72.	2248.367	-21.010	4106.999	8.260	0.000	2102.543	.130	-0.000
73.	2233.630	-20.320	4117.138	7.820	0.000	2102.624	.120	-0.000
74.	2219.526	-19.570	4126.742	7.380	0.000	2102.701	.120	-0.000
75.	2206.104	-18.750	4135.804	6.940	0.000	2102.774	.110	-0.000
76.	2193.393	-17.870	4144.315	6.490	0.000	2102.844	.110	-0.000
77.	2181.422	-16.930	4152.269	6.040	0.000	2102.910	.100	-0.000
78.	2170.219	-15.930	4159.660	5.590	0.000	2102.971	.090	-0.000
79.	2159.806	-14.870	4166.481	5.130	0.000	2103.029	.090	-0.000
80.	2150.215	-13.740	4172.726	4.680	0.000	2103.082	.080	-0.000
81.	2141.461	-12.560	4178.394	4.220	0.000	2103.130	.070	-0.000
82.	2133.570	-11.320	4183.476	3.750	0.000	2103.173	.060	-0.000
83.	2126.559	-10.030	4187.989	3.290	0.000	2103.212	.060	-0.000
84.	2120.446	-8.690	4191.871	2.820	0.000	2103.246	.050	-0.000
85.	2115.248	-7.310	4195.177	2.350	0.000	2103.275	.040	-0.000
86.	2110.976	-5.900	4197.886	1.880	0.000	2103.298	.030	-0.000
87.	2107.642	-4.430	4199.995	1.410	0.000	2103.316	.020	-0.000
88.	2105.254	-2.960	4201.503	.940	0.000	2103.330	.020	-0.000
89.	2103.619	-1.450	4202.408	.470	0.000	2103.338	.010	-0.000
90.	2103.340	-0.000	4202.710	-0.000	0.000	2103.340	0.000	-0.000
91.	2103.819	1.490	4202.408	-0.470	0.000	2103.338	-0.010	-0.000
92.	2105.254	2.960	4201.503	-1.410	0.000	2103.316	-0.020	-0.000
93.	2107.642	4.430	4199.995	-2.350	0.000	2103.298	-0.030	-0.000
94.	2110.976	5.900	4197.886	-3.290	0.000	2103.275	-0.040	-0.000
95.	2115.248	7.310	4195.177	-4.220	0.000	2103.246	-0.050	-0.000
96.	2120.446	8.690	4191.871	-5.130	0.000	2103.212	-0.060	-0.000
97.	2126.559	10.030	4187.989	-6.040	0.000	2103.173	-0.060	-0.000
98.	2133.570	11.320	4183.476	-6.940	0.000	2103.130	-0.060	-0.000
99.	2141.461	12.560	4178.394	-7.820	0.000	2103.082	-0.070	-0.000

X-PLANE (YZ-PLANE) TELLURIUM DIOXIDE

BULK

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	2150.215	13.740	-0.000	4172.728	-4.660	-0.000	2103.082	-0.060	0.000
101.	2159.806	14.870	-0.000	4166.481	-5.130	-0.000	2103.029	-0.090	0.000
102.	2170.219	15.930	-0.000	4159.660	-5.590	-0.000	2102.971	-0.090	0.000
103.	2181.422	16.930	-0.000	4152.269	-6.040	-0.060	2102.910	-0.160	0.000
104.	2193.393	17.870	-0.000	4144.315	-6.490	-0.000	2102.844	-0.110	0.000
105.	2206.104	18.750	-0.000	4135.804	-6.940	-0.000	2102.774	-0.110	0.000
106.	2219.526	19.570	-0.000	4126.742	-7.360	-0.000	2102.701	-0.120	0.000
107.	2233.630	20.320	-0.000	4117.136	-7.620	-0.000	2102.624	-0.120	0.000
108.	2248.387	21.010	-0.000	4106.999	-7.820	-0.000	2102.543	-0.130	0.000
109.	2263.765	21.640	-0.000	4096.333	-8.260	-0.000	2102.459	-0.130	0.000
110.	2279.734	22.220	-0.000	4085.149	-9.110	-0.000	2102.373	-0.140	0.000
111.	2296.261	22.740	-0.000	4073.457	-9.540	-0.000	2102.284	-0.140	0.000
112.	2313.314	23.200	-0.000	4061.267	-9.950	-0.000	2102.192	-0.140	0.000
113.	2330.861	23.610	-0.000	4048.566	-10.360	-0.000	2102.099	-0.150	0.000
114.	2348.865	23.970	-0.000	4035.432	-10.770	-0.000	2102.003	-0.150	0.000
115.	2367.307	24.280	-0.000	4021.809	-11.160	-0.000	2101.906	-0.150	0.000
116.	2386.141	24.550	-0.000	4007.733	-11.550	-0.000	2101.808	-0.150	0.000
117.	2405.359	24.770	-0.000	3993.214	-11.940	-0.000	2101.709	-0.160	0.000
118.	2424.870	24.950	-0.000	3978.267	-12.310	-0.000	2101.609	-0.160	0.000
119.	2444.702	25.080	-0.000	3962.904	-12.660	-0.000	2101.509	-0.160	0.000
120.	2464.803	25.160	-0.000	3947.139	-13.040	-0.000	2101.410	-0.160	0.000
121.	2485.143	25.240	-0.000	3930.986	-13.400	-0.000	2101.310	-0.150	0.000
122.	2505.691	25.270	-0.000	3914.461	-13.740	-0.000	2101.212	-0.150	0.000
123.	2526.416	25.260	-0.000	3897.579	-14.060	-0.000	2101.114	-0.150	0.000
124.	2547.290	25.220	-0.000	3880.355	-14.400	0.000	2101.016	-0.150	0.000
125.	2568.284	25.150	-0.000	3862.807	-14.710	0.000	2100.924	-0.150	0.000
126.	2589.369	25.050	-0.000	3844.950	-15.020	0.000	2100.833	-0.140	0.000
127.	2610.516	24.920	-0.000	3826.804	-15.310	0.000	2100.743	-0.140	0.000
128.	2631.703	24.770	-0.000	3808.384	-15.590	0.000	2100.657	-0.130	0.000
129.	2652.698	24.590	-0.000	3789.711	-15.860	0.000	2100.575	-0.130	0.000
130.	2674.076	24.390	-0.000	3770.802	-16.120	0.000	2100.496	-0.120	0.000
131.	2695.214	24.170	-0.000	3751.676	-16.360	0.000	2100.422	-0.110	0.000
132.	2716.286	23.920	-0.000	3732.356	-16.590	0.000	2100.352	-0.110	0.000
133.	2737.266	23.660	-0.000	3712.864	-16.810	0.000	2100.287	-0.100	0.000
134.	2758.136	23.370	-0.000	3693.215	-17.010	0.000	2100.227	-0.090	0.000
135.	2778.822	23.070	-0.000	3673.434	-17.200	0.000	2100.173	-0.080	0.000
136.	2799.448	22.750	-0.000	3653.542	-17.360	0.000	2100.125	-0.070	0.000
137.	2819.845	22.420	-0.000	3633.562	-17.520	0.000	2100.084	-0.060	0.000
138.	2840.043	22.060	-0.000	3613.516	-17.650	0.000	2100.049	-0.050	0.000
139.	2860.020	21.700	-0.000	3593.429	-17.770	0.000	2100.022	-0.040	0.000
140.	2879.759	21.320	-0.000	3573.324	-17.870	0.000	2100.001	-0.030	0.000
141.	2899.239	20.920	-0.000	3553.225	-17.950	0.000	2099.984	-0.020	0.000
142.	2918.443	20.520	-0.000	3533.157	-18.010	0.000	2099.964	-0.010	0.000
143.	2937.353	20.100	-0.000	3513.145	-18.040	0.000	2099.960	-0.000	0.000
144.	2955.952	19.670	-0.000	3493.214	-18.060	0.000	2100.000	0.000	0.000
145.	2974.223	19.220	-0.000	3473.390	-18.050	0.000	2100.049	0.000	0.000
146.	2992.151	18.770	-0.000	3453.700	-18.030	0.000	2100.049	0.000	0.000
147.	3009.720	18.310	-0.000	3434.169	-17.970	0.000	2100.087	0.000	0.000
148.	3026.914	17.840	-0.000	3414.824	-17.890	0.000	2100.134	0.000	0.000
149.	3043.721	17.360	-0.000	3395.693	-17.790	0.000	2100.169	0.000	0.000

X-PLANE (YZ-PLANE) TELLURIUM DIOXIDE									
	LPMI12			LPMI13			FSRVEL		
	LNGVEL	FSRVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13	BULK	
150.	3060.126	-0.000	-17.660	0.000	2106.253	.113	-0.000		
151.	3076.115	-0.000	-17.506	0.000	2100.326	.120	-0.000		
152.	3091.677	-0.000	-17.316	0.000	2100.407	.130	-0.000		
153.	3106.794	-0.000	-17.100	0.000	2100.496	.150	-0.000		
154.	3121.466	-0.000	-16.850	0.000	2100.594	.160	-0.000		
155.	3135.675	-0.000	-16.586	0.000	2100.698	.170	-0.000		
156.	3149.408	-0.000	-16.270	0.000	2100.810	.190	-0.000		
157.	3162.656	-0.000	-15.940	0.000	2100.928	.200	-0.000		
158.	3175.413	-0.000	-15.570	0.000	2101.053	.210	-0.000		
159.	3187.665	-0.000	-15.170	0.000	2101.182	.210	-0.000		
160.	3199.405	-0.000	-14.730	0.000	2101.316	.220	-0.000		
161.	3210.625	0.000	-14.260	-0.000	2101.454	.220	-0.000		
162.	3221.317	0.000	-13.760	-0.000	2101.594	.220	-0.000		
163.	3231.472	0.000	-13.230	-0.000	2101.736	.220	-0.000		
164.	3241.065	0.000	-12.660	-0.000	2101.879	.220	-0.000		
165.	3250.148	0.000	-12.060	-0.000	2102.021	.220	-0.000		
166.	3258.655	0.000	-11.430	-0.000	2102.162	.220	-0.000		
167.	3266.600	0.000	-10.770	-0.000	2102.300	.210	-0.000		
168.	3273.978	0.000	-10.070	-0.000	2102.434	.210	-0.000		
169.	3280.784	0.000	-9.350	-0.000	2102.563	.200	-0.000		
170.	3287.014	0.000	-8.600	-0.000	2102.686	.190	-0.000		
171.	3292.663	0.000	-7.820	-0.000	2102.801	.180	-0.000		
172.	3297.727	0.000	-7.020	-0.000	2102.907	.170	-0.000		
173.	3302.203	0.000	-6.190	-0.000	2103.004	.160	-0.000		
174.	3306.088	0.000	-5.350	-0.000	2103.090	.150	-0.000		
175.	3309.360	0.000	-4.490	-0.000	2103.165	.140	-0.000		
176.	3312.076	0.000	-3.610	-0.000	2103.227	.130	-0.000		
177.	3314.175	0.000	-2.720	-0.000	2103.276	.120	-0.000		
178.	3315.676	0.000	-1.820	-0.000	2103.312	.110	-0.000		
179.	3316.576	0.000	-0.910	-0.000	2103.333	.100	-0.000		
180.	3316.876	-0.000	0.000	0.000	2103.340	-.000	-0.000		

Z-PLANE (XY-PLANE) TELLURIUM DIOXIDE

BULK

	LNGVEL	LPFH12	LPFH13	FSRVEL	FSRH12	FSRH13	SSRVEL	SSRH12	SSRH13
0.	3316.876	0.000	0.000	3049.399	0.000	0.000	2103.340	0.000	0.000
1.	3326.786	16.050	0.000	3038.670	-21.340	0.000	2103.340	-0.000	0.000
2.	3352.525	28.320	0.000	3010.162	-33.770	0.000	2103.340	0.000	0.000
3.	3387.809	32.910	0.000	2978.996	-40.090	0.000	2103.340	0.000	0.000
4.	3427.931	34.750	0.000	2924.003	-43.680	0.000	2103.340	0.000	0.000
5.	3470.361	35.420	0.000	2873.516	-46.050	0.000	2103.340	0.000	0.000
6.	3513.763	35.420	0.000	2820.276	-47.830	0.000	2103.340	0.000	0.000
7.	3557.401	35.070	0.000	2765.932	-49.290	0.000	2103.340	0.000	0.000
8.	3600.843	34.530	0.000	2708.216	-50.560	0.000	2103.340	-0.000	0.000
9.	3643.821	33.870	0.000	2650.107	-51.760	0.000	2103.340	0.000	0.000
10.	3686.160	33.120	0.000	2590.693	-52.870	0.000	2103.340	0.000	0.000
11.	3727.736	32.320	0.000	2530.706	-53.930	0.000	2103.340	0.000	0.000
12.	3768.464	31.660	0.000	2469.652	-54.960	0.000	2103.340	-0.000	0.000
13.	3808.275	30.620	0.000	2407.808	-55.960	0.000	2103.340	-0.000	0.000
14.	3847.119	29.730	0.000	2345.245	-56.950	0.000	2103.340	0.000	0.000
15.	3884.955	28.830	0.000	2282.023	-57.920	0.000	2103.340	0.000	0.000
16.	3921.746	27.910	0.000	2218.199	-58.870	0.000	2103.340	0.000	0.000
17.	3957.466	26.950	0.000	2153.825	-59.820	0.000	2103.340	-0.000	0.000
18.	3992.089	26.000	0.000	2088.954	-60.750	0.000	2103.340	0.000	0.000
19.	4025.593	25.120	0.000	2023.637	-61.670	0.000	2103.340	0.000	0.000
20.	4057.956	24.170	0.000	1957.926	-62.590	0.000	2103.340	0.000	0.000
21.	4089.167	23.220	0.000	1891.882	-63.450	0.000	2103.340	0.000	0.000
22.	4119.204	22.270	0.000	1825.557	-64.360	0.000	2103.340	-0.000	0.000
23.	4148.055	21.320	0.000	1759.016	-65.260	0.000	2103.340	0.000	0.000
24.	4175.706	20.360	0.000	1692.330	-66.130	0.000	2103.340	-0.000	0.000
25.	4202.145	19.400	0.000	1625.571	-66.980	0.000	2103.340	0.000	0.000
26.	4227.360	18.440	0.000	1558.822	-67.810	0.000	2103.340	0.000	0.000
27.	4251.342	17.460	0.000	1492.177	-68.630	0.000	2103.340	0.000	0.000
28.	4274.080	16.510	0.000	1425.744	-69.420	0.000	2103.340	0.000	0.000
29.	4295.564	15.550	0.000	1359.643	-70.190	0.000	2103.340	0.000	0.000
30.	4315.787	14.560	0.000	1294.017	-70.930	0.000	2103.340	0.000	0.000
31.	4334.741	13.610	0.000	1229.031	-71.630	0.000	2103.340	0.000	0.000
32.	4352.419	12.640	0.000	1164.883	-72.290	0.000	2103.340	-0.000	0.000
33.	4368.813	11.670	0.000	1101.805	-72.950	0.000	2103.340	0.000	0.000
34.	4383.918	10.700	0.000	1040.080	-73.410	0.000	2103.340	0.000	0.000
35.	4397.728	9.730	0.000	980.047	-73.850	0.000	2103.340	0.000	0.000
36.	4410.237	8.760	0.000	922.121	-74.160	0.000	2103.340	-0.000	0.000
37.	4421.442	7.790	0.000	866.883	-74.500	0.000	2103.340	0.000	0.000
38.	4431.339	6.810	0.000	814.701	-74.500	0.000	2103.340	0.000	0.000
39.	4439.923	5.840	0.000	766.542	-73.750	0.000	2103.340	0.000	0.000
40.	4447.191	4.870	0.000	723.180	-72.750	0.000	2103.340	0.000	0.000
41.	4453.142	3.890	0.000	685.585	-70.800	0.000	2103.340	0.000	0.000
42.	4457.773	2.920	0.000	654.802	-67.060	0.000	2103.340	0.000	0.000
43.	4461.081	1.950	0.000	631.867	-59.460	0.000	2103.340	0.000	0.000
44.	4463.067	.970	0.000	617.665	-41.560	0.000	2103.340	0.000	0.000
45.	4463.729	0.000	0.000	612.883	0.000	0.000	2103.340	0.000	0.000
46.	4463.067	-.970	0.000	617.685	41.560	0.000	2103.340	0.000	0.000
47.	4461.081	-1.950	0.000	631.867	59.460	0.000	2103.340	0.000	0.000
48.	4457.773	-2.920	0.000	654.802	67.060	0.000	2103.340	-0.000	0.000
49.	4453.142	-3.890	0.000	685.585	70.800	0.000	2103.340	0.000	0.000

Z-PLANE (XY-PLANE) TELLURIUM DIOXIDE

BULK

	LNGLVL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
50.	4447.191	-4.870	0.000	723.180	72.750	0.000	2103.340	0.000	0.000
51.	4439.923	-5.640	0.000	766.542	73.750	0.000	2103.340	-0.000	0.000
52.	4431.339	-6.610	0.000	814.701	74.200	0.000	2103.340	0.000	0.000
53.	4421.442	-7.750	0.000	866.803	74.300	0.000	2103.340	0.000	0.000
54.	4410.237	-8.760	0.000	922.121	74.160	0.000	2103.340	0.000	0.000
55.	4397.726	-9.730	0.000	980.047	73.850	0.000	2103.340	0.000	0.000
56.	4383.918	-10.700	0.000	1040.040	73.410	0.000	2103.340	0.000	0.000
57.	4368.613	-11.670	0.000	1101.805	72.690	0.000	2103.340	0.000	0.000
58.	4352.419	-12.640	0.000	1164.863	72.290	0.000	2103.340	-0.000	0.000
59.	4334.741	-13.610	0.000	1229.031	71.630	0.000	2103.340	0.000	0.000
60.	4315.787	-14.580	0.000	1294.017	70.930	0.000	2103.340	0.000	0.000
61.	4295.564	-15.550	0.000	1359.643	70.190	0.000	2103.340	0.000	0.000
62.	4274.080	-16.510	0.000	1425.744	69.420	0.000	2103.340	0.000	0.000
63.	4251.342	-17.480	0.000	1492.177	68.630	0.000	2103.340	0.000	0.000
64.	4227.360	-18.440	0.000	1558.822	67.810	0.000	2103.340	-0.000	0.000
65.	4202.145	-19.400	0.000	1625.571	66.960	0.000	2103.340	0.000	0.000
66.	4175.706	-20.360	0.000	1692.330	66.130	0.000	2103.340	0.000	0.000
67.	4148.055	-21.320	0.000	1759.016	65.260	0.000	2103.340	0.000	0.000
68.	4119.204	-22.270	0.000	1825.557	64.380	0.000	2103.340	0.000	0.000
69.	4089.167	-23.220	0.000	1891.862	63.490	0.000	2103.340	0.000	0.000
70.	4057.956	-24.170	0.000	1957.926	62.590	0.000	2103.340	-0.000	0.000
71.	4025.593	-25.120	0.000	2023.637	61.670	0.000	2103.340	0.000	0.000
72.	3992.089	-26.060	0.000	2088.954	60.750	0.000	2103.340	0.000	0.000
73.	3957.466	-26.990	0.000	2153.825	59.820	0.000	2103.340	0.000	0.000
74.	3921.746	-27.910	0.000	2218.199	58.870	0.000	2103.340	-0.000	0.000
75.	3884.955	-28.830	0.000	2282.023	57.920	0.000	2103.340	0.000	0.000
76.	3847.119	-29.730	0.000	2345.245	56.950	0.000	2103.340	0.000	0.000
77.	3808.275	-30.620	0.000	2407.806	55.960	0.000	2103.340	0.000	0.000
78.	3768.464	-31.480	0.000	2469.652	54.960	0.000	2103.340	0.000	0.000
79.	3727.736	-32.320	0.000	2530.708	53.930	0.000	2103.340	0.000	0.000
80.	3686.160	-33.120	0.000	2590.893	52.870	0.000	2103.340	0.000	0.000
81.	3643.621	-33.670	0.000	2650.107	51.760	0.000	2103.340	0.000	0.000
82.	3600.843	-34.530	0.000	2708.216	50.560	0.000	2103.340	0.000	0.000
83.	3557.401	-35.070	0.000	2765.032	49.290	0.000	2103.340	0.000	0.000
84.	3513.763	-35.420	0.000	2820.276	47.830	0.000	2103.340	0.000	0.000
85.	3470.361	-35.420	0.000	2873.516	46.050	0.000	2103.340	0.000	0.000
86.	3427.931	-34.750	0.000	2924.803	43.680	0.000	2103.340	0.000	0.000
87.	3387.809	-32.910	0.000	2970.396	40.050	0.000	2103.340	0.000	0.000
88.	3352.525	-28.320	0.000	3010.162	33.770	0.000	2103.340	0.000	0.000
89.	3326.708	-18.050	0.000	3038.670	21.340	0.000	2103.340	0.000	0.000
90.	3316.876	0.000	0.000	3049.395	-0.000	0.000	2103.340	0.000	0.000
91.	3326.706	18.050	0.000	3038.670	-21.340	0.000	2103.340	0.000	0.000
92.	3352.525	28.320	0.000	3010.162	-33.770	0.000	2103.340	0.000	0.000
93.	3387.809	32.910	0.000	2970.396	-40.050	0.000	2103.340	0.000	0.000
94.	3427.931	34.750	0.000	2924.803	-43.680	0.000	2103.340	0.000	0.000
95.	3470.361	35.420	0.000	2873.516	-46.050	0.000	2103.340	0.000	0.000
96.	3513.763	35.420	0.000	2820.276	-47.830	0.000	2103.340	0.000	0.000
97.	3557.401	35.070	0.000	2765.032	-49.290	0.000	2103.340	0.000	0.000
98.	3600.843	34.530	0.000	2708.216	-50.560	0.000	2103.340	-0.000	0.000
99.	3643.621	33.670	0.000	2650.107	-51.760	0.000	2103.340	-0.000	0.000

Z-PLANE (XY-PLANE) TELLURIUM DIOXIDE

BULK

	LNGVEL	LPHI12	LPHI13	FSPVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	3686.160	33.120	0.000	2590.893	-52.876	0.000	2103.340	-0.000	0.000
101.	3727.736	32.320	0.000	2530.708	-53.930	0.000	2103.340	0.000	0.000
102.	3768.464	31.480	0.000	2469.652	-54.960	0.000	2103.340	-0.000	0.000
103.	3808.275	30.620	0.000	2407.806	-55.960	0.000	2103.340	0.000	0.000
104.	3847.119	29.730	0.000	2345.245	-56.950	0.000	2103.340	0.000	0.000
105.	3884.955	28.830	0.000	2282.023	-57.920	0.000	2103.340	0.000	0.000
106.	3921.746	27.910	0.000	2218.199	-58.870	0.000	2103.340	0.000	0.000
107.	3957.466	26.950	0.000	2153.825	-59.820	0.000	2103.340	0.000	0.000
108.	3992.089	26.060	0.000	2088.954	-60.750	0.000	2103.340	0.000	0.000
109.	4025.593	25.120	0.000	2023.637	-61.670	0.000	2103.340	0.000	0.000
110.	4057.956	24.170	0.000	1957.928	-62.590	0.000	2103.340	0.000	0.000
111.	4089.167	23.220	0.000	1891.862	-63.490	0.000	2103.340	0.000	0.000
112.	4119.204	22.270	0.000	1825.557	-64.360	0.000	2103.340	-0.000	0.000
113.	4148.055	21.320	0.000	1759.016	-65.260	0.000	2103.340	0.000	0.000
114.	4175.706	20.360	0.000	1692.330	-66.130	0.000	2103.340	0.000	0.000
115.	4202.145	19.400	0.000	1625.571	-66.960	0.000	2103.340	0.000	0.000
116.	4227.360	18.440	0.000	1558.822	-67.610	0.000	2103.340	-0.000	0.000
117.	4251.342	17.480	0.000	1492.177	-68.630	0.000	2103.340	0.000	0.000
118.	4274.080	16.510	0.000	1425.744	-69.420	0.000	2103.340	0.000	0.000
119.	4295.564	15.550	0.000	1359.643	-70.190	0.000	2103.340	-0.000	0.000
120.	4315.787	14.580	0.000	1294.017	-70.930	0.000	2103.340	0.000	0.000
121.	4334.741	13.610	0.000	1229.031	-71.630	0.000	2103.340	0.000	0.000
122.	4352.419	12.640	0.000	1164.863	-72.290	0.000	2103.340	-0.000	0.000
123.	4368.813	11.670	0.000	1101.805	-72.890	0.000	2103.340	0.000	0.000
124.	4383.918	10.700	0.000	1040.080	-73.410	0.000	2103.340	0.000	0.000
125.	4397.728	9.730	0.000	980.047	-73.850	0.000	2103.340	-0.000	0.000
126.	4410.237	8.760	0.000	922.121	-74.160	0.000	2103.340	0.000	0.000
127.	4421.442	7.790	0.000	866.803	-74.300	0.000	2103.340	0.000	0.000
128.	4431.339	6.810	0.000	814.701	-74.200	0.000	2103.340	0.000	0.000
129.	4439.923	5.840	0.000	766.542	-73.750	0.000	2103.340	0.000	0.000
130.	4447.191	4.870	0.000	723.180	-72.750	0.000	2103.340	0.000	0.000
131.	4453.142	3.890	0.000	685.585	-70.800	0.000	2103.340	0.000	0.000
132.	4457.773	2.920	0.000	654.802	-67.080	0.000	2103.340	0.000	0.000
133.	4461.081	1.950	0.000	631.867	-54.460	0.000	2103.340	0.000	0.000
134.	4463.067	.970	0.000	617.685	-41.500	0.000	2103.340	-0.000	0.000
135.	4463.725	-0.000	0.000	612.683	0.000	0.000	2103.340	0.000	0.000
136.	4463.067	-.970	0.000	617.685	41.580	0.000	2103.340	-0.000	0.000
137.	4461.081	-1.950	0.000	631.867	59.460	0.000	2103.340	0.000	0.000
138.	4457.773	-2.920	0.000	654.802	67.080	0.000	2103.340	-0.000	0.000
139.	4453.142	-3.890	0.000	685.585	70.800	0.000	2103.340	0.000	0.000
140.	4447.191	-4.870	0.000	723.180	72.750	0.000	2103.340	0.000	0.000
141.	4439.923	-5.840	0.000	766.542	73.750	0.000	2103.340	0.000	0.000
142.	4431.339	-6.810	0.000	814.701	74.200	0.000	2103.340	-0.000	0.000
143.	4421.442	-7.790	0.000	866.803	74.300	0.000	2103.340	0.000	0.000
144.	4410.237	-8.760	0.000	922.121	74.160	0.000	2103.340	0.000	0.000
145.	4397.726	-9.730	0.000	980.047	73.850	0.000	2103.340	-0.000	0.000
146.	4383.918	-10.700	0.000	1040.080	73.410	0.000	2103.340	0.000	0.000
147.	4368.813	-11.670	0.000	1101.805	72.890	0.000	2103.340	0.000	0.000
148.	4352.419	-12.640	0.000	1164.863	72.290	0.000	2103.340	0.000	0.000
149.	4334.741	-13.610	0.000	1229.031	71.630	0.000	2103.340	0.000	0.000

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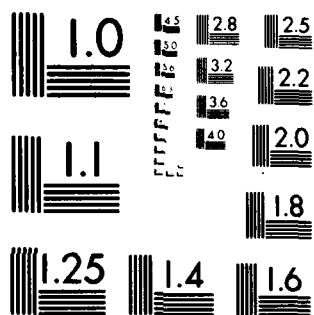
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MICROCOPY RESOLUTION TEST CHART
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	Z-PLANE (XY-PLANE) TELLURIUM DIOXIDE				BULK			
	LINGVEL	LPH12	LPH13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12
150.	4315.787	-14.580	0.000	1294.017	70.930	0.000	2103.340	0.000
151.	4295.564	-15.550	0.000	1359.643	70.190	0.000	2103.340	0.000
152.	4274.880	-16.510	0.000	1425.744	69.420	0.000	2103.340	0.000
153.	4251.342	-17.460	0.000	1492.177	68.630	0.000	2103.340	0.000
154.	4227.360	-18.440	0.000	1558.822	67.810	0.000	2103.340	0.000
155.	4202.145	-19.400	0.000	1625.571	66.980	0.000	2103.340	0.000
156.	4175.706	-20.360	0.000	1692.330	66.130	0.000	2103.340	0.000
157.	4148.055	-21.320	0.000	1759.018	65.260	0.000	2103.340	0.000
158.	4119.204	-22.270	0.000	1825.557	64.380	0.000	2103.340	0.000
159.	4089.167	-23.220	0.000	1891.842	63.490	0.000	2103.340	0.000
160.	4057.958	-24.170	0.000	1957.926	62.590	0.000	2103.340	0.000
161.	4025.593	-25.120	0.000	2023.837	61.674	0.000	2103.340	0.000
162.	3992.089	-26.060	0.000	2088.954	60.750	0.000	2103.340	0.000
163.	3957.466	-26.990	0.000	2153.825	59.820	0.000	2103.340	0.000
164.	3921.746	-27.910	0.000	2218.199	58.870	0.000	2103.340	0.000
165.	3884.955	-28.830	0.000	2282.023	57.920	0.000	2103.340	0.000
166.	3847.119	-29.730	0.000	2345.245	56.950	0.000	2103.340	0.000
167.	3808.275	-30.620	0.000	2407.808	55.960	0.000	2103.340	0.000
168.	3768.464	-31.460	0.000	2469.652	54.960	0.000	2103.340	0.000
169.	3727.736	-32.320	0.000	2530.786	53.930	0.000	2103.340	0.000
170.	3686.160	-33.120	0.000	2590.093	52.870	0.000	2103.340	0.000
171.	3643.621	-33.870	0.000	2650.107	51.760	0.000	2103.340	0.000
172.	3600.843	-34.530	0.000	2708.216	50.580	0.000	2103.340	0.000
173.	3557.401	-35.070	0.000	2765.032	49.290	0.000	2103.340	0.000
174.	3513.763	-35.420	0.000	2820.278	47.830	0.000	2103.340	0.000
175.	3470.361	-35.740	0.000	2873.516	46.050	0.000	2103.340	0.000
176.	3427.931	-36.790	0.000	2924.803	43.660	0.000	2103.340	0.000
177.	3387.809	-32.910	0.000	2970.396	40.090	0.000	2103.340	0.000
178.	3352.525	-28.320	0.000	3010.162	33.770	0.000	2103.340	0.000
179.	3326.786	-18.050	0.000	3038.670	21.340	0.000	2103.340	0.000
180.	3316.876	0.000	0.000	3049.399	-0.000	0.000	2103.340	0.000

110-PLANE TELLURIUM DIOXIDE

	LMW12	LMW11	FSR12L	FSPM12	FSPM13	SSR12L	SSPM12	SSPM13
0.	4874.211	-0.000	2641.855	20.219	-0.000	1316.599	47.439	-0.000
1.	4868.974	-0.012	2658.337	19.000	-0.000	1741.874	47.874	-0.000
2.	4846.058	-0.039	2673.762	17.660	-0.000	1764.941	46.760	-0.000
3.	4831.864	0.000	2688.018	16.200	-0.000	1791.801	45.529	-0.000
4.	4818.198	-0.010	2700.933	14.620	-0.000	1446.417	44.720	-0.000
5.	4805.737	-0.000	2712.575	12.910	-0.000	1446.765	43.920	-0.000
6.	4794.004	-0.012	2722.660	11.070	-0.000	1464.844	43.120	-0.000
7.	4783.286	0.000	2731.145	9.120	-0.000	1488.634	42.388	-0.000
8.	4773.568	-0.000	2737.941	7.070	-0.000	1512.124	41.644	-0.000
9.	4765.231	0.000	2742.966	4.920	-0.000	1535.289	40.880	-0.000
10.	4758.039	0.000	2746.155	2.600	0.000	1558.125	39.810	-0.000
11.	4752.145	-0.010	2747.454	.420	-0.000	1580.614	38.970	-0.000
12.	4747.504	-0.010	2746.843	-1.490	-0.000	1602.754	38.130	-0.000
13.	4744.375	-0.010	2744.300	-4.190	-0.000	1624.522	37.270	-0.000
14.	4742.516	-0.010	2739.837	-6.460	0.000	1645.917	36.420	-0.000
15.	4741.988	-0.010	2733.493	-8.680	0.000	1666.900	35.560	-0.000
16.	4742.755	1.164	2725.299	-10.820	-0.000	1687.584	34.700	-0.000
17.	4744.764	2.174	2715.321	-12.870	0.000	1707.601	33.839	-0.000
18.	4747.948	3.119	2703.654	-14.800	0.000	1727.457	32.959	0.000
19.	4752.229	3.981	2690.415	-16.610	0.000	1746.793	32.090	0.000
20.	4757.521	4.774	2675.692	-18.290	0.000	1765.491	31.220	-0.000
21.	4763.729	5.480	2659.581	-19.840	0.000	1784.147	30.349	-0.000
22.	4770.757	6.100	2642.236	-21.240	0.000	1802.137	29.460	0.000
23.	4778.507	6.540	2623.772	-22.510	0.000	1819.670	28.540	0.000
24.	4786.981	7.009	2604.317	-23.650	0.000	1836.727	27.590	0.000
25.	4795.782	7.469	2584.001	-24.660	0.000	1853.115	26.610	-0.000
26.	4805.119	7.764	2562.950	-25.540	0.000	1869.415	25.620	0.000
27.	4814.900	7.989	2541.290	-26.300	0.000	1885.024	24.640	0.000
28.	4824.743	8.140	2519.145	-26.940	-0.000	1900.134	23.640	0.000
29.	4834.867	8.230	2496.634	-27.470	0.000	1914.741	22.640	0.000
30.	4845.098	8.274	2473.877	-27.890	0.000	1928.874	21.640	-0.000
31.	4855.366	8.259	2450.987	-28.190	0.000	1942.612	20.640	0.000
32.	4865.507	8.199	2428.075	-28.370	0.000	1955.870	19.640	0.000
33.	4875.761	8.079	2405.249	-28.450	0.000	1968.614	18.640	0.000
34.	4885.772	7.920	2382.615	-28.420	0.000	1980.814	17.640	0.000
35.	4895.591	7.730	2360.275	-28.280	-0.000	1991.844	16.640	0.000
36.	4905.171	7.510	2338.327	-28.020	0.000	2002.415	15.640	0.000
37.	4914.469	7.269	2316.869	-27.650	0.000	2012.801	14.640	0.000
38.	4923.444	6.970	2295.994	-27.150	0.000	2022.637	13.640	0.000
39.	4932.066	6.670	2275.791	-26.540	0.000	2031.927	12.640	0.000
40.	4940.297	6.349	2256.349	-25.800	0.000	2040.654	11.640	0.000
41.	4948.111	5.999	2237.751	-24.920	0.000	2048.825	10.640	0.000
42.	4955.479	5.629	2220.079	-23.920	0.000	2056.436	9.640	0.000
43.	4962.377	5.240	2203.410	-22.770	0.000	2063.483	8.640	0.000
44.	4968.785	4.849	2187.816	-21.490	0.000	2069.963	7.640	0.000
45.	4974.687	4.420	2173.344	-20.060	0.000	2075.874	6.640	0.000
46.	4980.092	4.000	2160.130	-18.500	0.000	2081.215	5.640	0.000
47.	4984.874	3.560	2148.151	-16.790	0.000	2085.981	4.640	0.000
48.	4989.148	3.120	2137.516	-14.960	0.000	2090.173	3.640	0.000
49.	4992.849	2.670	2128.244	-12.990	0.000	2093.789	2.640	0.000

119-PLANET TELLURIUM NITRIDE

	LMSVEL	LPM12	LPM13	FSPVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
50.	4195.973	2.210	-0.000	2120.368	-10.919	0.000	2096.827	4.380	0.000
51.	4198.510	1.750	-0.010	2113.984	-8.730	0.000	2099.785	3.398	0.000
52.	4200.554	1.290	-0.010	2109.863	-6.460	0.000	2101.165	2.480	0.000
53.	4201.801	.820	-0.008	2105.668	-4.130	0.000	2102.865	1.598	0.000
54.	4202.547	.359	-0.007	2103.746	-1.760	0.000	2103.183	.678	0.000
55.	4202.589	-.120	-0.000	2103.394	.630	0.000	2103.820	-.248	-0.000
56.	4202.229	-1.000	-0.000	2104.565	3.029	0.000	2102.875	-1.169	-0.000
57.	4201.165	-1.079	-0.010	2107.253	5.370	0.000	2101.951	-2.879	0.000
58.	4199.582	-1.570	-0.000	2111.475	7.670	0.000	2100.245	-2.960	0.000
59.	4197.244	-2.080	-0.000	2117.182	9.909	0.000	2098.663	-3.870	0.000
60.	4194.596	-2.469	-0.008	2124.557	12.829	0.000	2095.295	-4.770	0.000
61.	4191.966	-2.919	-0.000	2132.965	14.940	0.000	2091.957	-5.688	0.000
62.	4188.964	-3.160	-0.000	2142.968	15.949	0.000	2089.437	-6.590	0.000
63.	4185.198	-3.100	-0.000	2154.319	17.710	0.000	2083.535	-7.499	0.000
64.	4177.284	-4.220	-0.000	2166.955	19.349	0.000	2078.465	-8.400	0.000
65.	4171.633	-4.649	-0.000	2180.950	20.830	0.000	2072.824	-9.309	0.000
66.	4165.464	-5.059	-0.000	2195.911	22.180	0.000	2066.512	-10.219	0.000
67.	4159.795	-5.449	-0.000	2212.882	23.399	0.000	2059.933	-11.119	0.000
68.	4151.645	-5.820	-0.000	2229.290	24.460	0.000	2052.484	-12.020	0.000
69.	4144.839	-5.180	-0.000	2247.461	25.460	0.000	2044.584	-12.929	0.000
70.	4136.882	-5.520	-0.000	2266.514	26.200	0.000	2036.112	-13.839	0.000
71.	4127.561	-5.730	-0.000	2286.369	26.880	0.000	2027.889	-14.730	0.000
72.	4119.748	-7.130	-0.000	2306.938	27.430	0.000	2017.511	-15.630	0.000
73.	4109.597	-7.530	-0.000	2328.132	27.860	0.000	2007.385	-16.539	0.000
74.	4108.145	-7.639	-0.000	2349.861	28.170	0.000	1996.712	-17.430	0.000
75.	4098.434	-7.940	-0.000	2372.929	28.370	0.000	1985.499	-18.330	0.000
76.	4090.587	-8.010	-0.000	2394.536	28.450	0.000	1973.745	-19.230	0.000
77.	4079.414	-8.140	-0.000	2417.284	28.420	0.000	1961.661	-20.130	0.000
78.	4068.207	-8.239	-0.000	2440.168	28.290	0.000	1949.842	-21.030	0.000
79.	4049.944	-8.270	-0.000	2463.092	28.040	0.000	1935.312	-21.930	0.000
80.	4039.647	-8.260	-0.000	2485.917	27.680	0.000	1921.454	-22.820	0.000
81.	4029.583	-8.190	-0.000	2508.558	27.210	0.000	1907.097	-23.710	0.000
82.	4019.665	-8.060	-0.000	2530.890	26.620	0.000	1892.219	-24.610	0.000
83.	4008.650	-7.870	-0.000	2552.794	25.920	0.000	1876.865	-25.500	0.000
84.	4000.140	-7.510	-0.000	2574.148	25.090	0.000	1860.475	-26.390	0.000
85.	3991.022	-7.270	-0.000	2594.827	24.149	0.000	1844.474	-27.279	0.000
86.	3982.388	-6.860	-0.000	2614.785	23.079	0.000	1827.787	-28.169	0.000
87.	3974.331	-6.360	-0.000	2633.652	21.869	0.000	1810.871	-29.060	0.000
88.	3966.980	-5.780	-0.000	2651.542	20.520	0.000	1792.691	-29.929	0.000
89.	3960.342	-5.129	-0.000	2668.245	19.049	0.000	1774.855	-30.809	0.000
90.	3954.607	-4.460	-0.000	2683.695	17.420	0.000	1755.764	-31.689	0.000
91.	3949.837	-3.730	-0.000	2697.693	15.670	0.000	1736.634	-32.559	0.000
92.	3946.125	-2.620	-0.000	2710.024	13.800	0.000	1717.073	-33.420	0.000
93.	3943.553	-1.650	-0.000	2720.800	11.808	0.000	1697.084	-34.299	0.000
94.	3942.192	-.510	-0.000	2729.811	9.700	0.000	1676.580	-35.150	0.000
95.	3942.103	.470	-0.000	2737.871	7.520	0.000	1655.879	-36.020	0.000
96.	3943.330	1.590	-0.000	2742.431	5.270	0.000	1634.655	-36.879	0.000
97.	3945.981	2.780	-0.000	2745.843	2.979	0.000	1613.075	-37.779	0.000
98.	3949.025	3.820	-0.000	2747.408	.679	0.000	1591.111	-38.679	0.000
99.	3955.093	4.910	-0.000	2747.004	-1.620	0.000	1568.784	-39.620	0.000

119-PLANE TELLURIUM DIOXIDE

	LMSJEL	LMH12	LMH13	FSMEL	FSM12	FSM13	SSMEL	SSM12	SSM13
100.	3961.677	5.979	-0.010	2744.784	-3.079	0.000	1546.119	-40.259	0.000
101.	3969.534	6.970	-0.000	2740.534	-6.050	7.000	1523.096	-41.090	0.000
102.	3978.604	7.910	-0.030	2734.569	-4.160	0.000	1499.754	-41.810	0.000
103.	3988.813	8.789	-0.030	2726.474	-18.170	0.000	1476.119	-42.719	0.000
104.	4000.079	9.600	-0.000	2717.528	-12.060	0.000	1452.165	-43.560	0.000
105.	4012.309	10.269	0.000	2706.640	-13.830	-0.000	1427.949	-44.399	0.000
106.	4025.400	10.801	-0.010	2694.309	-15.479	-0.000	1403.449	-45.140	0.000
107.	4039.275	11.400	0.000	2680.543	-16.999	-0.000	1379.783	-45.910	0.000
108.	4053.810	11.947	0.000	2665.756	-18.340	-0.000	1353.734	-46.710	0.000
109.	4069.913	12.209	-0.000	2649.759	-19.650	0.000	1328.354	-47.489	0.000
110.	4086.486	12.600	-0.000	2632.765	-20.909	-0.000	1298.577	-48.230	0.000
111.	4100.436	12.600	-0.000	2614.447	-21.839	-0.000	1277.524	-48.979	0.000
112.	4115.671	12.829	0.000	2594.212	-22.769	0.000	1251.927	-49.780	0.000
113.	4133.107	12.991	-0.000	2576.904	-23.579	0.000	1226.093	-50.420	0.000
114.	4149.552	12.900	-0.000	2557.019	-24.299	0.000	1200.164	-51.120	0.000
115.	4166.260	12.600	-0.000	2536.666	-24.900	0.000	1174.180	-51.889	0.000
116.	4182.828	12.760	-0.000	2515.985	-25.420	-0.000	1148.183	-52.449	0.000
117.	4199.305	12.620	-0.000	2494.952	-25.950	0.000	1122.027	-53.090	0.000
118.	4215.626	12.430	-0.000	2473.779	-26.199	-0.000	1095.944	-53.710	0.000
119.	4231.773	12.219	-0.000	2452.514	-26.440	-0.000	1069.949	-54.290	0.000
120.	4247.575	11.950	0.000	2431.244	-26.680	0.000	1044.914	-54.859	0.000
121.	4263.103	11.669	-0.000	2410.052	-26.679	-0.000	1019.212	-55.370	0.000
122.	4278.271	11.300	0.000	2389.021	-26.559	0.000	992.573	-55.859	0.000
123.	4293.013	10.999	-0.000	2368.224	-26.349	-0.000	967.144	-56.299	0.000
124.	4307.355	10.520	-0.000	2347.753	-26.159	0.000	941.984	-56.690	0.000
125.	4321.217	10.220	-0.000	2327.678	-25.060	0.000	917.164	-57.029	0.000
126.	4334.561	9.810	-0.000	2308.052	-25.670	0.000	892.577	-57.290	0.000
127.	4347.364	9.369	-0.000	2289.979	-25.190	0.000	869.657	-57.680	0.000
128.	4359.609	8.930	-0.000	2270.495	-24.610	0.000	845.135	-57.999	0.000
129.	4371.280	8.460	-0.000	2252.692	-23.379	0.000	822.204	-57.609	0.000
130.	4382.247	7.900	-0.000	2235.627	-23.140	0.000	799.936	-57.690	0.000
131.	4392.699	7.490	-0.000	2219.153	-22.250	-0.000	776.414	-57.249	0.000
132.	4402.447	6.990	-0.000	2203.459	-21.240	0.000	752.741	-56.829	0.000
133.	4411.523	6.470	0.000	2189.473	-20.130	0.000	728.804	-56.190	0.000
134.	4419.911	5.950	-0.000	2175.960	-18.919	0.000	719.319	-55.310	0.000
135.	4427.598	5.420	-0.000	2163.470	-17.580	-0.000	701.265	-54.120	0.000
136.	4434.569	4.880	-0.000	2152.052	-16.140	0.000	685.487	-52.469	0.000
137.	4440.914	4.360	-0.000	2141.750	-14.590	0.000	670.574	-50.679	0.000
138.	4446.324	3.790	-0.000	2132.604	-12.950	0.000	657.153	-47.780	0.000
139.	4451.000	3.230	-0.000	2124.644	-11.210	0.000	645.324	-44.780	0.000
140.	4455.100	2.690	0.000	2117.919	-9.390	-0.000	635.285	-39.810	0.000
141.	4458.353	2.110	-0.000	2112.430	-7.490	0.000	626.880	-36.870	0.000
142.	4460.844	1.550	0.000	2108.230	-5.530	-0.000	620.434	-26.950	0.000
143.	4462.567	.980	-0.000	2105.312	-3.570	0.000	615.936	-17.910	0.000
144.	4463.520	.420	-0.000	2103.695	-1.500	-0.000	613.633	-7.979	0.000
145.	4463.702	-.150	0.000	2103.396	.540	0.000	612.954	2.040	0.000
146.	4463.113	-.720	0.000	2104.786	2.580	0.000	614.504	13.389	0.000
147.	4461.793	-1.280	0.000	2106.691	4.680	0.000	618.065	22.980	0.000
148.	4459.624	-1.850	0.000	2110.292	6.570	0.000	623.589	30.659	0.000
149.	4456.758	-2.410	0.000	2115.174	8.480	0.000	631.044	37.270	0.000

110-PLANE TELLURIUM DIOXIDE

	LMVEL	LMH12	LMH13	FSRVEL	FSMH12	FSMH13	SSRVEL	SSMH12	SSMH13
150.	4453.076	-2.970	0.000	2121.314	10.767	0.000	640.332	42.329	0.000
151.	4440.666	-3.430	0.000	2128.699	12.169	0.000	551.365	46.253	0.000
152.	4433.507	-4.000	0.000	2137.237	13.839	0.000	664.047	49.290	0.000
153.	4437.608	-4.630	-0.000	2147.048	15.629	0.000	51.630	51.630	0.000
154.	4430.979	-5.179	0.000	2157.945	16.919	0.000	678.264	53.430	0.000
155.	4423.627	-5.700	0.000	2169.014	18.249	0.000	591.914	54.799	0.000
156.	4415.569	-6.230	0.000	2182.971	19.579	0.000	718.879	55.819	0.000
157.	4406.915	-6.760	0.000	2197.004	20.730	0.000	729.044	56.950	0.000
158.	4397.782	-7.250	0.000	2211.041	21.790	0.000	740.387	57.060	0.000
159.	4387.287	-7.750	0.000	2227.447	22.739	0.000	758.544	57.590	0.000
160.	4376.567	-8.263	0.000	2246.541	23.570	0.000	784.689	57.670	0.000
161.	4365.193	-8.719	0.000	2262.096	24.309	0.000	814.235	57.619	0.000
162.	4353.219	-9.179	0.000	2288.170	24.039	0.000	857.444	57.550	0.000
163.	4340.675	-9.610	0.000	2308.974	25.460	0.000	881.274	57.390	0.000
164.	4327.508	-10.030	0.000	2318.348	25.490	0.000	905.544	57.150	0.000
165.	4313.484	-10.449	0.000	2338.221	26.720	0.000	938.217	56.853	0.000
166.	4298.857	-10.820	-0.000	2358.429	26.469	0.000	955.235	56.449	0.000
167.	4285.297	-11.180	0.000	2379.172	26.619	0.000	988.543	56.069	0.000
168.	4270.710	-11.519	-0.000	2400.101	26.570	0.000	1005.887	55.689	0.000
169.	4256.066	-11.829	0.000	2421.227	26.549	0.000	1031.429	55.100	0.000
170.	4239.247	-12.090	0.000	2442.679	26.520	0.000	1057.697	54.559	0.000
171.	4223.295	-12.330	0.000	2463.748	26.429	0.000	1083.677	53.999	0.000
172.	4207.932	-12.549	0.000	2484.974	26.029	0.000	1109.477	53.389	0.000
173.	4190.622	-12.790	-0.000	2506.065	25.549	0.000	1135.794	52.759	0.000
174.	4174.808	-12.829	0.000	2526.926	25.160	0.000	1161.865	52.110	0.000
175.	4157.495	-12.890	0.000	2547.464	24.599	0.000	1187.987	51.449	0.000
176.	4140.911	-12.900	0.000	2567.595	24.329	0.000	1213.871	50.750	0.000
177.	4124.409	-12.860	0.000	2587.188	24.150	0.000	1239.751	50.060	0.000
178.	4108.050	-12.760	0.000	2606.172	22.240	0.000	1265.514	49.329	0.000
179.	4091.971	-12.590	0.000	2624.430	21.380	0.000	1291.144	48.589	0.000
180.	4075.211	-12.349	0.000	2641.455	20.219	0.000	1316.599	47.830	0.000

Z-PLANE (XY-PLANE) YAG

	LNGVEL	LPH112	LPH113	FSPVEL	FSPH112	FSPH113	SSRVEL	SSPH112	SSPH113
0.	4567.765	0.000	0.000	5027.397	0.000	0.000	5027.397	0.000	0.000
1.	4567.820	.040	0.000	5027.303	-1.120	0.000	5027.397	-0.000	0.000
2.	4567.987	.060	0.000	5027.019	-1.250	0.000	5027.397	0.000	0.000
3.	4568.263	.130	0.000	5026.546	-1.370	0.000	5027.397	0.000	0.000
4.	4568.640	.170	0.000	5025.892	-1.490	0.000	5027.397	0.000	0.000
5.	4569.139	.210	0.000	5025.054	-1.610	0.000	5027.397	0.000	0.000
6.	4569.735	.250	0.000	5024.039	-1.720	0.000	5027.397	0.000	0.000
7.	4570.431	.290	0.000	5022.851	-1.830	0.000	5027.397	0.000	0.000
8.	4571.225	.320	0.000	5021.496	-1.940	0.000	5027.397	0.000	0.000
9.	4572.112	.360	0.000	5019.981	-1.040	0.000	5027.397	0.000	0.000
10.	4573.086	.350	0.000	5018.314	-1.140	0.000	5027.397	0.000	0.000
11.	4574.146	.420	0.000	5016.503	-1.230	0.000	5027.397	0.000	0.000
12.	4575.287	.450	0.000	5014.557	-1.320	0.000	5027.397	0.000	0.000
13.	4576.496	.480	0.000	5012.485	-1.400	0.000	5027.397	0.000	0.000
14.	4577.775	.500	0.000	5010.296	-1.470	0.000	5027.397	0.000	0.000
15.	4579.113	.520	0.000	5008.007	-1.530	0.000	5027.397	0.000	0.000
16.	4580.505	.540	0.000	5005.622	-1.590	0.000	5027.397	0.000	0.000
17.	4581.943	.560	0.000	5003.156	-1.640	0.000	5027.397	0.000	0.000
18.	4583.420	.570	0.000	5000.621	-1.680	0.000	5027.397	0.000	0.000
19.	4584.930	.580	0.000	4998.029	-1.720	0.000	5027.397	0.000	0.000
20.	4586.464	.590	0.000	4995.393	-1.740	0.000	5027.397	0.000	0.000
21.	4588.015	.600	0.000	4992.726	-1.760	0.000	5027.397	0.000	0.000
22.	4589.576	.600	0.000	4990.041	-1.770	0.000	5027.397	0.000	0.000
23.	4591.136	.600	0.000	4987.351	-1.770	0.000	5027.397	0.000	0.000
24.	4592.695	.590	0.000	4984.660	-1.760	0.000	5027.397	0.000	0.000
25.	4594.236	.550	0.000	4982.007	-1.740	0.000	5027.397	0.000	0.000
26.	4595.760	.560	0.000	4979.380	-1.720	0.000	5027.397	0.000	0.000
27.	4597.254	.560	0.000	4976.800	-1.690	0.000	5027.397	0.000	0.000
28.	4598.713	.550	0.000	4974.276	-1.640	0.000	5027.397	0.000	0.000
29.	4600.130	.530	0.000	4971.829	-1.590	0.000	5027.397	0.000	0.000
30.	4601.498	.510	0.000	4969.462	-1.530	0.000	5027.397	0.000	0.000
31.	4602.810	.490	0.000	4967.190	-1.470	0.000	5027.397	0.000	0.000
32.	4604.061	.460	0.000	4965.023	-1.390	0.000	5027.397	0.000	0.000
33.	4605.244	.440	0.000	4962.973	-1.320	0.000	5027.397	0.000	0.000
34.	4606.354	.410	0.000	4961.048	-1.230	0.000	5027.397	0.000	0.000
35.	4607.385	.380	0.000	4959.258	-1.140	0.000	5027.397	0.000	0.000
36.	4608.333	.350	0.000	4957.612	-1.040	0.000	5027.397	0.000	0.000
37.	4609.194	.310	0.000	4956.117	-.940	0.000	5027.397	0.000	0.000
38.	4609.963	.260	0.000	4954.761	-.830	0.000	5027.397	0.000	0.000
39.	4610.637	.240	0.000	4953.610	-.720	0.000	5027.397	0.000	0.000
40.	4611.212	.200	0.000	4952.610	-.610	0.000	5027.397	0.000	0.000
41.	4611.687	.160	0.000	4951.784	-.490	0.000	5027.397	0.000	0.000
42.	4612.058	.120	0.000	4951.136	-.370	0.000	5027.397	0.000	0.000
43.	4612.325	.080	0.000	4950.675	-.250	0.000	5027.397	0.000	0.000
44.	4612.485	.040	0.000	4950.396	-.120	0.000	5027.397	0.000	0.000
45.	4612.539	0.000	0.000	4950.302	0.000	0.000	5027.397	0.000	0.000
46.	4612.485	-.040	0.000	4950.396	.120	0.000	5027.397	0.000	0.000
47.	4612.325	-.080	0.000	4950.675	.250	0.000	5027.397	0.000	0.000
48.	4612.058	-.120	0.000	4951.136	.370	0.000	5027.397	0.000	0.000
49.	4611.687	-.160	0.000	4951.784	.490	0.000	5027.397	0.000	0.000

Z-PLANE (XY-PLANE) YAG

	LNQVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
50.	8611.212	-280	0.000	4952.610	.610	0.000	5027.397	-0.000	0.000
51.	8610.637	-240	0.000	4953.610	.720	0.000	5027.397	0.000	0.000
52.	8609.963	-260	0.000	4954.761	.830	0.000	5027.397	0.000	0.000
53.	8609.194	-310	0.000	4956.117	.940	0.000	5027.397	-0.000	0.000
54.	8608.333	-358	0.000	4957.612	1.040	0.000	5027.397	-0.000	0.000
55.	8607.385	-388	0.000	4959.258	1.140	0.000	5027.397	0.000	0.000
56.	8606.354	-410	0.000	4961.046	1.230	0.000	5027.397	0.000	0.000
57.	8605.244	-440	0.000	4962.973	1.320	0.000	5027.397	0.000	0.000
58.	8604.061	-460	0.000	4965.023	1.390	0.000	5027.397	-0.000	0.000
59.	8602.810	-490	0.000	4967.190	1.470	0.000	5027.397	-0.000	0.000
60.	8601.498	-510	0.000	4969.462	1.530	0.000	5027.397	0.000	0.000
61.	8600.130	-530	0.000	4971.825	1.550	0.000	5027.397	0.000	0.000
62.	8598.713	-550	0.000	4974.278	1.640	0.000	5027.397	-0.000	0.000
63.	8597.254	-560	0.000	4976.800	1.660	0.000	5027.397	0.000	0.000
64.	8595.760	-580	0.000	4979.380	1.720	0.000	5027.397	0.000	0.000
65.	8594.236	-590	0.000	4982.007	1.740	0.000	5027.397	-0.000	0.000
66.	8592.695	-590	0.000	4984.666	1.760	0.000	5027.397	0.000	0.000
67.	8591.136	-600	0.000	4987.351	1.770	0.000	5027.397	0.000	0.000
68.	8589.576	-600	0.000	4990.041	1.770	0.000	5027.397	-0.000	0.000
69.	8588.015	-600	0.000	4992.726	1.760	0.000	5027.397	0.000	0.000
70.	8586.464	-590	0.000	4995.393	1.740	0.000	5027.397	-0.000	0.000
71.	8584.930	-580	0.000	4998.029	1.720	0.000	5027.397	0.000	0.000
72.	8583.420	-570	0.000	5000.621	1.660	0.000	5027.397	-0.000	0.000
73.	8581.943	-560	0.000	5003.156	1.640	0.000	5027.397	0.000	0.000
74.	8580.505	-540	0.000	5005.622	1.590	0.000	5027.397	-0.000	0.000
75.	8579.113	-520	0.000	5008.007	1.530	0.000	5027.397	0.000	0.000
76.	8577.775	-500	0.000	5010.296	1.470	0.000	5027.397	0.000	0.000
77.	8576.490	-480	0.000	5012.485	1.400	0.000	5027.397	0.000	0.000
78.	8575.287	-450	0.000	5014.557	1.320	0.000	5027.397	0.000	0.000
79.	8574.146	-428	0.000	5016.503	1.230	0.000	5027.397	0.000	0.000
80.	8573.066	-390	0.000	5018.314	1.140	0.000	5027.397	0.000	0.000
81.	8572.112	-360	0.000	5019.981	1.040	0.000	5027.397	0.000	0.000
82.	8571.225	-320	0.000	5021.496	.940	0.000	5027.397	-0.000	0.000
83.	8570.431	-250	0.000	5022.851	.830	0.000	5027.397	0.000	0.000
84.	8569.735	-230	0.000	5024.035	.720	0.000	5027.397	0.000	0.000
85.	8569.139	-210	0.000	5025.054	.610	0.000	5027.397	0.000	0.000
86.	8568.648	-170	0.000	5025.892	.490	0.000	5027.397	0.000	0.000
87.	8568.263	-130	0.000	5026.546	.370	0.000	5027.397	0.000	0.000
88.	8567.987	-90	0.000	5027.019	.250	0.000	5027.397	0.000	0.000
89.	8567.820	-60	0.000	5027.303	.120	0.000	5027.397	-0.000	0.000
90.	8567.765	0.000	0.000	5027.397	-0.000	0.000	5027.397	0.000	0.000
91.	8567.820	.040	0.000	5027.303	-.120	0.000	5027.397	0.000	0.000
92.	8567.987	.080	0.000	5027.819	-.250	0.000	5027.397	0.000	0.000
93.	8568.263	.130	0.000	5028.546	-.370	0.000	5027.397	0.000	0.000
94.	8568.648	.170	0.000	5029.592	-.490	0.000	5027.397	0.000	0.000
95.	8569.139	.210	0.000	5029.054	-.610	0.000	5027.397	0.000	0.000
96.	8569.735	.250	0.000	5028.035	-.720	0.000	5027.397	0.000	0.000
97.	8570.431	.290	0.000	5026.851	-.830	0.000	5027.397	0.000	0.000
98.	8571.225	.320	0.000	5021.496	-.940	0.000	5027.397	0.000	0.000
99.	8572.112	.360	0.000	5019.981	-1.040	0.000	5027.397	0.000	0.000

2-PLANE (XY-PLANE) YAG

	LPM12	LPM13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
180.	.390	0.000	5018.314	-1.140	0.000	5027.397	0.000	0.000
181.	.420	0.000	5016.503	-1.230	0.000	5027.397	-0.000	0.000
182.	.450	0.000	5014.557	-1.320	0.000	5027.397	0.000	0.000
183.	.480	0.000	5012.485	-1.400	0.000	5027.397	0.000	0.000
184.	.500	0.000	5010.298	-1.470	0.000	5027.397	0.000	0.000
185.	.520	0.000	5008.007	-1.530	0.000	5027.397	0.000	0.000
186.	.540	0.000	5005.622	-1.590	0.000	5027.397	0.000	0.000
187.	.560	0.000	5003.156	-1.640	0.000	5027.397	0.000	0.000
188.	.570	0.000	5000.621	-1.680	0.000	5027.397	0.000	0.000
189.	.580	0.000	4998.029	-1.720	0.000	5027.397	0.000	0.000
190.	.590	0.000	4995.393	-1.740	0.000	5027.397	0.000	0.000
191.	.600	0.000	4992.726	-1.760	0.000	5027.397	0.000	0.000
192.	.610	0.000	4990.041	-1.770	0.000	5027.397	0.000	0.000
193.	.620	0.000	4987.351	-1.770	0.000	5027.397	0.000	0.000
194.	.630	0.000	4984.668	-1.760	0.000	5027.397	0.000	0.000
195.	.640	0.000	4982.007	-1.740	0.000	5027.397	0.000	0.000
196.	.650	0.000	4979.380	-1.720	0.000	5027.397	0.000	0.000
197.	.660	0.000	4976.800	-1.680	0.000	5027.397	0.000	0.000
198.	.670	0.000	4974.276	-1.640	0.000	5027.397	0.000	0.000
199.	.680	0.000	4971.829	-1.590	0.000	5027.397	0.000	0.000
200.	.690	0.000	4969.462	-1.530	0.000	5027.397	0.000	0.000
201.	.700	0.000	4967.190	-1.470	0.000	5027.397	0.000	0.000
202.	.710	0.000	4965.023	-1.390	0.000	5027.397	0.000	0.000
203.	.720	0.000	4962.973	-1.320	0.000	5027.397	0.000	0.000
204.	.730	0.000	4961.048	-1.230	0.000	5027.397	0.000	0.000
205.	.740	0.000	4959.258	-1.140	0.000	5027.397	0.000	0.000
206.	.750	0.000	4957.612	-1.040	0.000	5027.397	0.000	0.000
207.	.760	0.000	4956.117	-.940	0.000	5027.397	0.000	0.000
208.	.770	0.000	4954.781	-.830	0.000	5027.397	0.000	0.000
209.	.780	0.000	4953.610	-.720	0.000	5027.397	0.000	0.000
210.	.790	0.000	4952.610	-.610	0.000	5027.397	0.000	0.000
211.	.800	0.000	4951.784	-.500	0.000	5027.397	0.000	0.000
212.	.810	0.000	4951.136	-.370	0.000	5027.397	0.000	0.000
213.	.820	0.000	4950.675	-.250	0.000	5027.397	0.000	0.000
214.	.830	0.000	4950.396	-.120	0.000	5027.397	0.000	0.000
215.	.840	0.000	4950.302	0.000	0.000	5027.397	0.000	0.000
216.	.850	0.000	4950.396	.120	0.000	5027.397	0.000	0.000
217.	.860	0.000	4950.675	.250	0.000	5027.397	0.000	0.000
218.	.870	0.000	4951.136	.370	0.000	5027.397	0.000	0.000
219.	.880	0.000	4951.784	.490	0.000	5027.397	0.000	0.000
220.	.890	0.000	4952.610	.610	0.000	5027.397	0.000	0.000
221.	.900	0.000	4953.610	.720	0.000	5027.397	0.000	0.000
222.	.910	0.000	4954.781	.830	0.000	5027.397	0.000	0.000
223.	.920	0.000	4956.117	.940	0.000	5027.397	0.000	0.000
224.	.930	0.000	4957.612	1.040	0.000	5027.397	0.000	0.000
225.	.940	0.000	4959.258	1.140	0.000	5027.397	0.000	0.000
226.	.950	0.000	4961.048	1.230	0.000	5027.397	0.000	0.000
227.	.960	0.000	4962.973	1.320	0.000	5027.397	0.000	0.000
228.	.970	0.000	4965.023	1.390	0.000	5027.397	0.000	0.000
229.	.980	0.000	4967.190	1.470	0.000	5027.397	0.000	0.000
230.	.990	0.000	4969.462	1.530	0.000	5027.397	0.000	0.000
231.	1.000	0.000	4971.829	1.590	0.000	5027.397	0.000	0.000
232.	1.010	0.000	4974.276	1.640	0.000	5027.397	0.000	0.000
233.	1.020	0.000	4976.800	1.680	0.000	5027.397	0.000	0.000
234.	1.030	0.000	4979.380	1.720	0.000	5027.397	0.000	0.000
235.	1.040	0.000	4982.007	1.740	0.000	5027.397	0.000	0.000
236.	1.050	0.000	4984.668	1.760	0.000	5027.397	0.000	0.000
237.	1.060	0.000	4987.351	1.770	0.000	5027.397	0.000	0.000
238.	1.070	0.000	4990.041	1.770	0.000	5027.397	0.000	0.000
239.	1.080	0.000	4992.726	1.760	0.000	5027.397	0.000	0.000
240.	1.090	0.000	4995.393	1.740	0.000	5027.397	0.000	0.000
241.	1.100	0.000	4998.029	1.720	0.000	5027.397	0.000	0.000
242.	1.110	0.000	4999.462	1.680	0.000	5027.397	0.000	0.000
243.	1.120	0.000	5000.675	1.640	0.000	5027.397	0.000	0.000
244.	1.130	0.000	5001.675	1.600	0.000	5027.397	0.000	0.000
245.	1.140	0.000	5002.485	1.560	0.000	5027.397	0.000	0.000
246.	1.150	0.000	5003.156	1.520	0.000	5027.397	0.000	0.000
247.	1.160	0.000	5003.781	1.470	0.000	5027.397	0.000	0.000
248.	1.170	0.000	5004.356	1.420	0.000	5027.397	0.000	0.000
249.	1.180	0.000	5004.881	1.370	0.000	5027.397	0.000	0.000
250.	1.190	0.000	5005.356	1.320	0.000	5027.397	0.000	0.000
251.	1.200	0.000	5005.781	1.270	0.000	5027.397	0.000	0.000
252.	1.210	0.000	5006.156	1.220	0.000	5027.397	0.000	0.000
253.	1.220	0.000	5006.481	1.170	0.000	5027.397	0.000	0.000
254.	1.230	0.000	5006.756	1.120	0.000	5027.397	0.000	0.000
255.	1.240	0.000	5007.031	1.070	0.000	5027.397	0.000	0.000
256.	1.250	0.000	5007.306	1.020	0.000	5027.397	0.000	0.000
257.	1.260	0.000	5007.581	0.970	0.000	5027.397	0.000	0.000
258.	1.270	0.000	5007.856	0.920	0.000	5027.397	0.000	0.000
259.	1.280	0.000	5008.131	0.870	0.000	5027.397	0.000	0.000
260.	1.290	0.000	5008.406	0.820	0.000	5027.397	0.000	0.000
261.	1.300	0.000	5008.681	0.770	0.000	5027.397	0.000	0.000
262.	1.310	0.000	5008.956	0.720	0.000	5027.397	0.000	0.000
263.	1.320	0.000	5009.231	0.670	0.000	5027.397	0.000	0.000
264.	1.330	0.000	5009.506	0.620	0.000	5027.397	0.000	0.000
265.	1.340	0.000	5009.781	0.570	0.000	5027.397	0.000	0.000
266.	1.350	0.000	5010.056	0.520	0.000	5027.397	0.000	0.000
267.	1.360	0.000	5010.331	0.470	0.000	5027.397	0.000	0.000
268.	1.370	0.000	5010.606	0.420	0.000	5027.397	0.000	0.000
269.	1.380	0.000	5010.881	0.370	0.000	5027.397	0.000	0.000
270.	1.390	0.000	5011.156	0.320	0.000	5027.397	0.000	0.000
271.	1.400	0.000	5011.431	0.270	0.000	5027.397	0.000	0.000
272.	1.410	0.000	5011.706	0.220	0.000	5027.397	0.000	0.000
273.	1.420	0.000	5011.981	0.170	0.000	5027.397	0.000	0.000
274.	1.430	0.000	5012.256	0.120	0.000	5027.397	0.000	0.000
275.	1.440	0.000	5012.531	0.070	0.000	5027.397	0.000	0.000
276.	1.450	0.000	5012.806	0.020	0.000	5027.397	0.000	0.000
277.	1.460	0.000	5013.081	0.000	0.000	5027.397	0.000	0.000
278.	1.470	0.000	5013.356	0.000	0.000	5027.397	0.000	0.000
279.	1.480	0.000	5013.631	0.000	0.000	5027.397	0.000	0.000
280.	1.490	0.000	5013.906	0.000	0.000	5027.397	0.000	0.000

Z-PLANE (XY-PLANE) YAG

	LNQVEL	LPM12	LPM13	FSPVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
150.	8601.496	-510	0.000	4969.462	1.530	0.000	5027.397	0.000	0.000
151.	8600.130	-530	0.000	4971.829	1.590	0.000	5027.397	-0.000	0.000
152.	8598.713	-550	0.000	4974.278	1.640	0.000	5027.397	-0.000	0.000
153.	8597.254	-560	0.000	4976.800	1.680	0.000	5027.397	0.000	0.000
154.	8595.760	-580	0.000	4979.380	1.720	0.000	5027.397	-0.000	0.000
155.	8594.238	-590	0.000	4982.007	1.740	0.000	5027.397	0.000	0.000
156.	8592.695	-590	0.000	4984.660	1.760	0.000	5027.397	0.000	0.000
157.	8591.138	-600	0.000	4987.351	1.770	0.000	5027.397	0.000	0.000
158.	8589.576	-600	0.000	4990.041	1.770	0.000	5027.397	0.000	0.000
159.	8588.015	-600	0.000	4992.726	1.760	0.000	5027.397	-0.000	0.000
160.	8586.464	-590	0.000	4995.393	1.740	0.000	5027.397	-0.000	0.000
161.	8584.930	-580	0.000	4998.029	1.720	0.000	5027.397	0.000	0.000
162.	8583.420	-570	0.000	5000.621	1.680	0.000	5027.397	0.000	0.000
163.	8581.943	-560	0.000	5003.156	1.640	0.000	5027.397	-0.000	0.000
164.	8580.505	-540	0.000	5005.622	1.590	0.000	5027.397	0.000	0.000
165.	8579.113	-520	0.000	5008.007	1.530	0.000	5027.397	0.000	0.000
166.	8577.775	-500	0.000	5010.296	1.470	0.000	5027.397	-0.000	0.000
167.	8576.498	-460	0.000	5012.465	1.400	0.000	5027.397	0.000	0.000
168.	8575.287	-450	0.000	5014.557	1.320	0.000	5027.397	0.000	0.000
169.	8574.146	-420	0.000	5016.503	1.230	0.000	5027.397	0.000	0.000
170.	8573.088	-390	0.000	5018.314	1.140	0.000	5027.397	0.000	0.000
171.	8572.112	-360	0.000	5019.961	1.040	0.000	5027.397	-0.000	0.000
172.	8571.225	-320	0.000	5021.496	.940	0.000	5027.397	0.000	0.000
173.	8570.431	-290	0.000	5022.851	.830	0.000	5027.397	-0.000	0.000
174.	8569.735	-250	0.000	5024.039	.720	0.000	5027.397	0.000	0.000
175.	8569.139	-210	0.000	5025.054	.610	0.000	5027.397	0.000	0.000
176.	8568.644	-170	0.000	5025.892	.490	0.000	5027.397	-0.000	0.000
177.	8568.263	-130	0.000	5026.546	.370	0.000	5027.397	0.000	0.000
178.	8567.987	-90	0.000	5027.019	.250	0.000	5027.397	0.000	0.000
179.	8567.720	-040	0.000	5027.303	.120	0.000	5027.397	0.000	0.000
180.	8567.465	0.000	0.000	5027.397	-0.000	0.000	5027.397	0.000	0.000

111-PLANE YAG

BULK

	LNQVEL	LPN112	LPN113	FSRVEL	FSPN112	FSPN113	SSRVEL	SSPN112	SSPN113
0.	8612.539	-0.000	0.000	5027.397	0.000	0.000	4950.302	0.000	0.000
1.	8612.539	0.000	0.000	5027.351	-0.060	-0.040	4950.349	0.060	-0.040
2.	8612.540	0.000	0.060	5027.210	-0.120	-0.090	4950.430	0.120	-0.090
3.	8612.543	0.000	0.090	5026.977	-0.180	-0.130	4950.723	0.190	-0.130
4.	8612.545	0.000	0.120	5026.651	-0.240	-0.170	4951.046	0.250	-0.170
5.	8612.549	0.000	0.140	5026.235	-0.300	-0.210	4951.465	0.310	-0.210
6.	8612.554	0.000	0.170	5025.729	-0.360	-0.260	4951.970	0.360	-0.260
7.	8612.559	0.000	0.200	5025.136	-0.420	-0.300	4952.563	0.420	-0.300
8.	8612.564	0.000	0.230	5024.458	-0.470	-0.340	4953.241	0.470	-0.340
9.	8612.571	0.000	0.250	5023.698	-0.520	-0.380	4954.002	0.530	-0.380
10.	8612.577	0.000	0.280	5022.856	-0.570	-0.410	4954.842	0.580	-0.410
11.	8612.585	0.000	0.300	5021.942	-0.620	-0.450	4955.757	0.630	-0.450
12.	8612.592	0.000	0.330	5020.955	-0.670	-0.490	4956.744	0.680	-0.490
13.	8612.600	0.000	0.350	5019.900	-0.710	-0.520	4957.799	0.720	-0.520
14.	8612.608	0.000	0.370	5018.784	-0.750	-0.550	4958.915	0.760	-0.550
15.	8612.616	0.000	0.390	5017.610	-0.780	-0.580	4960.086	0.790	-0.580
16.	8612.624	0.000	0.410	5016.387	-0.820	-0.610	4961.311	0.820	-0.610
17.	8612.632	0.000	0.430	5015.122	-0.860	-0.640	4962.576	0.850	-0.640
18.	8612.640	0.000	0.450	5013.822	-0.900	-0.670	4963.876	0.880	-0.670
19.	8612.647	0.000	0.470	5012.499	-0.940	-0.700	4965.200	0.910	-0.700
20.	8612.655	0.000	0.480	5011.162	-0.980	-0.730	4966.536	0.940	-0.730
21.	8612.661	0.000	0.500	5009.826	-1.020	-0.760	4967.872	0.970	-0.760
22.	8612.666	0.000	0.510	5008.506	-1.060	-0.790	4969.190	1.000	-0.790
23.	8612.673	0.000	0.520	5007.226	-1.100	-0.820	4970.472	1.030	-0.820
24.	8612.676	0.000	0.530	5006.005	-1.140	-0.850	4971.693	1.060	-0.850
25.	8612.683	0.000	0.540	5004.873	-1.180	-0.880	4972.824	1.090	-0.880
26.	8612.687	0.000	0.540	5003.865	-1.220	-0.910	4973.832	1.120	-0.910
27.	8612.689	0.000	0.550	5003.018	-1.260	-0.940	4974.679	1.150	-0.940
28.	8612.692	0.000	0.550	5002.374	-1.300	-0.970	4975.323	1.180	-0.970
29.	8612.693	0.000	0.550	5001.965	-1.340	-1.000	4975.728	1.210	-1.000
30.	8612.693	0.000	0.560	5001.831	-1.380	-1.030	4975.866	1.240	-1.030
31.	8612.693	0.000	0.550	5001.969	-1.420	-1.060	4975.728	1.270	-1.060
32.	8612.692	0.000	0.550	5002.374	-1.460	-1.090	4975.323	1.300	-1.090
33.	8612.689	0.000	0.550	5003.018	-1.500	-1.120	4974.679	1.330	-1.120
34.	8612.687	0.000	0.540	5003.865	-1.540	-1.150	4973.832	1.360	-1.150
35.	8612.683	0.000	0.540	5004.873	-1.580	-1.180	4972.824	1.390	-1.180
36.	8612.678	0.000	0.530	5006.005	-1.620	-1.210	4971.693	1.420	-1.210
37.	8612.673	0.000	0.520	5007.226	-1.660	-1.240	4970.472	1.450	-1.240
38.	8612.666	0.000	0.510	5008.506	-1.700	-1.270	4969.190	1.480	-1.270
39.	8612.661	0.000	0.500	5009.826	-1.740	-1.300	4967.872	1.510	-1.300
40.	8612.655	0.000	0.480	5011.162	-1.780	-1.330	4966.536	1.540	-1.330
41.	8612.647	0.000	0.470	5012.499	-1.820	-1.360	4965.200	1.570	-1.360
42.	8612.640	0.000	0.450	5013.822	-1.860	-1.390	4963.876	1.600	-1.390
43.	8612.632	0.000	0.430	5015.122	-1.900	-1.420	4962.576	1.630	-1.420
44.	8612.624	0.000	0.410	5016.387	-1.940	-1.450	4961.311	1.660	-1.450
45.	8612.616	0.000	0.390	5017.610	-1.980	-1.480	4960.086	1.690	-1.480
46.	8612.608	0.000	0.370	5018.784	-2.020	-1.510	4958.915	1.720	-1.510
47.	8612.600	0.000	0.350	5019.900	-2.060	-1.540	4957.799	1.750	-1.540
48.	8612.592	0.000	0.330	5020.955	-2.100	-1.570	4956.744	1.780	-1.570
49.	8612.585	0.000	0.300	5021.942	-2.140	-1.600	4955.757	1.810	-1.600

111-PLANE VAG

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13
58.	8612.577	-0.000	.280	5022.858	.570	-.410	4954.042	-.590	-.410
59.	8612.571	-0.000	.250	5023.836	.520	-.360	4954.002	-.530	-.360
59.	8612.564	-0.000	.230	5024.458	.470	-.340	4953.241	-.480	-.330
59.	8612.559	-0.000	.200	5025.136	.420	-.300	4952.563	-.420	-.300
59.	8612.554	-0.000	.170	5025.729	.360	-.260	4951.970	-.360	-.260
59.	8612.549	-0.000	.140	5026.235	.300	-.210	4951.465	-.310	-.210
59.	8612.545	-0.000	.120	5026.651	.240	-.170	4951.046	-.250	-.170
59.	8612.543	-0.000	.090	5026.977	.180	-.130	4950.490	-.190	-.130
59.	8612.540	-0.000	.060	5027.210	.120	-.090	4950.345	-.120	-.090
59.	8612.539	-0.000	.030	5027.351	.060	-.040	4950.302	-.060	-.040
60.	8612.539	0.000	0.000	5027.397	-0.000	0.000	4950.302	-0.000	0.000
61.	8612.539	0.000	-.030	5027.351	-.060	.140	4950.345	.060	.060
62.	8612.540	0.000	-.060	5027.210	-.120	.120	4950.490	.120	.090
63.	8612.543	0.000	-.090	5026.977	-.160	.130	4950.723	.190	.130
64.	8612.545	0.000	-.120	5026.651	-.240	.170	4951.046	.250	.170
65.	8612.549	0.000	-.140	5026.235	-.300	.210	4951.465	.310	.210
66.	8612.554	0.000	-.170	5025.729	-.360	.260	4951.970	.360	.260
67.	8612.559	0.000	-.200	5025.136	-.420	.300	4952.563	.420	.300
68.	8612.564	0.000	-.230	5024.458	-.470	.340	4953.241	.480	.340
69.	8612.571	0.000	-.250	5023.836	-.520	.360	4954.002	.530	.360
70.	8612.577	0.000	-.280	5022.858	-.570	.410	4954.042	.580	.410
71.	8612.585	0.000	-.300	5021.942	-.620	.450	4955.757	.630	.450
72.	8612.592	0.000	-.330	5020.955	-.670	.490	4956.744	.680	.490
73.	8612.600	0.000	-.350	5019.900	-.710	.520	4957.739	.720	.520
74.	8612.608	0.000	-.370	5018.784	-.750	.550	4958.915	.760	.550
75.	8612.616	0.000	-.390	5017.610	-.780	.590	4960.088	.790	.590
76.	8612.624	0.000	-.410	5016.387	-.820	.620	4961.311	.820	.620
77.	8612.632	0.000	-.430	5015.122	-.840	.640	4962.576	.850	.640
78.	8612.640	0.000	-.450	5013.822	-.860	.670	4963.876	.860	.670
79.	8612.647	0.000	-.470	5012.499	-.870	.690	4965.200	.880	.690
80.	8612.655	0.000	-.480	5011.162	-.880	.720	4966.536	.880	.720
81.	8612.661	0.000	-.500	5009.826	-.890	.740	4967.872	.890	.740
82.	8612.666	0.000	-.510	5008.506	-.900	.760	4969.190	.900	.760
83.	8612.673	0.000	-.520	5007.226	-.920	.770	4970.472	.920	.770
84.	8612.679	0.000	-.530	5006.005	-.930	.790	4971.693	.930	.790
85.	8612.683	0.000	-.540	5004.873	-.940	.800	4972.824	.940	.800
86.	8612.687	0.000	-.540	5003.665	-.950	.810	4973.832	.950	.810
87.	8612.689	0.000	-.550	5003.318	-.960	.820	4974.879	.960	.820
88.	8612.692	0.000	-.550	5002.374	-.970	.830	4975.923	.970	.830
89.	8612.693	0.000	-.550	5001.969	-.980	.830	4976.966	.980	.830
90.	8612.693	-0.000	-.550	5001.831	0.000	.830	4977.728	-0.000	.830
91.	8612.693	-0.000	-.550	5001.969	.160	.830	4978.472	.160	.830
92.	8612.692	-0.000	-.550	5002.374	.350	.820	4979.190	.350	.820
93.	8612.689	-0.000	-.550	5003.318	.490	.820	4979.879	.490	.820
94.	8612.687	-0.000	-.540	5003.665	.610	.810	4980.472	.610	.810
95.	8612.683	-0.000	-.530	5004.873	.710	.800	4981.693	.710	.800
96.	8612.679	-0.000	-.520	5006.005	.770	.790	4982.824	.770	.790
97.	8612.673	-0.000	-.520	5007.226	.820	.760	4983.872	.820	.760
98.	8612.668	-0.000	-.510	5008.506	.850	.740	4984.872	.850	.740
99.	8612.661	-0.000	-.500	5009.826	.870	.740	4985.923	.870	.740

111-PLANE YAG

BULK

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	0612.655	-0.000	-0.480	5011.162	.060	.720	4966.336	-.660	.120
101.	0612.667	-0.000	-0.470	5012.499	.070	.650	4965.200	-.880	.090
102.	0612.660	-0.000	-0.450	5013.822	.060	.670	4963.676	-.670	.670
103.	0612.632	-0.000	-0.430	5015.122	.040	.640	4962.976	-.650	.640
104.	0612.624	-0.000	-0.410	5016.387	.020	.620	4961.311	-.620	.620
105.	0612.616	-0.000	-0.390	5017.610	.760	.550	4960.088	-.750	.520
106.	0612.608	-0.000	-0.370	5018.784	.750	.550	4958.915	-.760	.520
107.	0612.600	-0.000	-0.350	5019.900	.710	.520	4957.739	-.720	.520
108.	0612.592	-0.000	-0.330	5020.955	.670	.450	4956.744	-.660	.450
109.	0612.585	-0.000	-0.300	5021.942	.620	.450	4955.757	-.630	.450
110.	0612.577	-0.000	-0.280	5022.856	.570	.410	4954.842	-.580	.410
111.	0612.571	-0.000	-0.250	5023.696	.520	.360	4953.902	-.530	.360
112.	0612.564	-0.000	-0.230	5024.458	.470	.340	4953.241	-.500	.340
113.	0612.559	-0.000	-0.200	5025.136	.420	.300	4952.563	-.450	.300
114.	0612.554	-0.000	-0.170	5025.729	.360	.260	4951.970	-.380	.260
115.	0612.549	-0.000	-0.140	5026.235	.300	.210	4951.465	-.310	.210
116.	0612.545	-0.000	-0.120	5026.651	.240	.170	4950.940	-.250	.170
117.	0612.543	-0.000	-0.090	5026.977	.180	.130	4950.349	-.190	.130
118.	0612.540	-0.000	-0.060	5027.210	.120	.090	4949.690	-.120	.090
119.	0612.535	-0.000	-0.030	5027.351	.060	.040	4949.030	-.060	.040
120.	0612.539	-0.000	0.000	5027.397	0.000	0.000	4948.302	0.000	0.000
121.	0612.539	0.000	.030	5027.351	-.060	-.040	4947.509	.060	-.040
122.	0612.540	0.000	.060	5027.210	-.120	-.090	4946.642	.120	-.090
123.	0612.543	0.000	.090	5026.977	-.180	-.130	4945.723	.190	-.130
124.	0612.545	0.000	.120	5026.651	-.240	-.170	4944.744	.250	-.170
125.	0612.549	0.000	.140	5026.235	-.300	-.210	4943.690	.310	-.210
126.	0612.554	0.000	.170	5025.729	-.360	-.260	4942.563	.380	-.260
127.	0612.559	0.000	.200	5025.136	-.420	-.300	4941.311	.450	-.300
128.	0612.564	0.000	.230	5024.458	-.470	-.340	4940.088	.500	-.340
129.	0612.571	0.000	.260	5023.696	-.520	-.360	4938.842	.530	-.360
130.	0612.577	0.000	.290	5022.856	-.570	-.410	4937.567	.580	-.410
131.	0612.585	0.000	.300	5021.942	-.620	-.450	4936.200	.630	-.450
132.	0612.592	0.000	.330	5020.955	-.670	-.490	4934.739	.680	-.490
133.	0612.600	0.000	.350	5019.900	-.710	-.520	4933.190	.720	-.520
134.	0612.606	0.000	.370	5018.784	-.750	-.550	4931.567	.760	-.550
135.	0612.616	0.000	.390	5017.610	-.760	-.590	4929.842	.790	-.590
136.	0612.624	0.000	.410	5016.387	-.820	-.610	4928.030	.820	-.610
137.	0612.632	0.000	.430	5015.122	-.840	-.640	4926.167	.850	-.640
138.	0612.640	0.000	.450	5013.822	-.860	-.670	4924.200	.880	-.670
139.	0612.647	0.000	.470	5012.499	-.880	-.690	4922.167	.900	-.690
140.	0612.655	0.000	.480	5011.162	-.900	-.720	4920.088	.920	-.720
141.	0612.661	0.000	.500	5009.826	-.920	-.740	4917.915	.940	-.740
142.	0612.666	0.000	.510	5008.506	-.950	-.760	4915.642	.960	-.760
143.	0612.673	0.000	.520	5007.226	-.970	-.770	4913.267	.980	-.770
144.	0612.678	0.000	.530	5006.005	-.980	-.790	4910.842	.990	-.790
145.	0612.683	0.000	.540	5004.873	-.990	-.800	4908.367	.990	-.800
146.	0612.687	0.000	.540	5003.665	-.990	-.800	4905.842	.990	-.800
147.	0612.689	0.000	.550	5003.018	-.990	-.800	4903.267	.990	-.800
148.	0612.692	0.000	.550	5002.374	-.990	-.800	4900.642	.990	-.800
149.	0612.693	0.000	.550	5001.969	-.990	-.800	4897.915	.990	-.800

111-PLANE YAG										BULK		
	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13				
150.	8612.693	0.000	.560	5001.831	-0.000	-.630	4375.866	-0.000	-.630			
151.	8612.693	-0.000	.550	5001.969	.160	-.830	4375.720	-.160	-.820			
152.	8612.692	-0.000	.550	5002.374	.350	-.830	4375.323	-.350	-.820			
153.	8612.689	-0.000	.550	5003.018	.490	-.820	4374.679	-.490	-.820			
154.	8612.687	-0.000	.540	5003.665	.610	-.810	4373.632	-.610	-.810			
155.	8612.683	-0.000	.540	5004.873	.710	-.800	4372.824	-.710	-.800			
156.	8612.678	-0.000	.530	5006.005	.770	-.790	4371.633	-.770	-.790			
157.	8612.673	-0.000	.520	5007.226	.820	-.770	4370.472	-.820	-.770			
158.	8612.668	-0.000	.510	5008.508	.850	-.760	4369.190	-.850	-.760			
159.	8612.661	-0.000	.500	5009.826	.870	-.740	4367.872	-.870	-.740			
160.	8612.655	-0.000	.480	5011.162	.860	-.720	4366.236	-.860	-.720			
161.	8612.647	-0.000	.470	5012.499	.870	-.690	4365.200	-.880	-.690			
162.	8612.640	-0.000	.450	5013.822	.860	-.670	4363.676	-.870	-.670			
163.	8612.632	-0.000	.430	5015.122	.840	-.640	4362.576	-.850	-.640			
164.	8612.624	-0.000	.410	5016.387	.820	-.620	4361.311	-.820	-.620			
165.	8612.616	-0.000	.390	5017.610	.780	-.550	4360.086	-.750	-.550			
166.	8612.608	-0.000	.370	5018.784	.750	-.550	4358.915	-.760	-.550			
167.	8612.600	-0.000	.350	5019.980	.710	-.520	4357.799	-.720	-.520			
168.	8612.592	-0.000	.330	5020.955	.670	-.450	4356.744	-.680	-.450			
169.	8612.585	-0.000	.300	5021.942	.620	-.450	4355.757	-.630	-.450			
170.	8612.577	-0.000	.280	5022.658	.570	-.410	4354.842	-.580	-.410			
171.	8612.571	-0.000	.256	5023.696	.520	-.380	4354.032	-.530	-.380			
172.	8612.564	-0.000	.230	5024.456	.470	-.340	4353.241	-.480	-.340			
173.	8612.559	-0.000	.200	5025.136	.420	-.300	4352.563	-.420	-.300			
174.	8612.554	-0.000	.170	5025.729	.360	-.260	4351.970	-.360	-.260			
175.	8612.549	-0.000	.140	5026.235	.300	-.210	4351.465	-.310	-.210			
176.	8612.545	-0.000	.120	5026.651	.240	-.170	4351.046	-.250	-.170			
177.	8612.543	-0.000	.090	5026.977	.180	-.130	4350.723	-.196	-.130			
178.	8612.540	-0.000	.060	5027.210	.120	-.090	4350.490	-.120	-.090			
179.	8612.539	-0.000	.030	5027.351	.060	-.040	4350.349	-.060	-.040			
180.	8612.539	0.000	-0.000	5027.397	-0.000	-0.000	4350.302	0.000	-0.000			

110-FLAME YAG

	LAGVEL	LPM112	LPM113	FSEVEL	FSP112	FSP113	SSRVEL	SSP112	SSP113
0.	622.432	6.600	-0.000	4976.124	-0.840	0.000	4976.133	.840	-0.000
1.	627.376	-0.000	-0.000	4974.917	-0.777	-0.600	4977.412	.650	0.000
2.	627.265	-0.000	0.000	4977.815	-0.690	0.000	4976.705	.860	0.000
3.	627.076	-0.000	-0.000	4975.831	-0.616	-0.600	4980.011	.860	-0.000
4.	626.814	-0.000	0.000	4971.972	-0.531	0.000	4981.327	.870	0.000
5.	626.470	-0.000	-0.000	4974.241	-0.440	-0.600	4982.651	.860	-0.000
6.	626.046	-0.000	-0.000	4970.642	-0.356	-0.000	4983.984	.860	0.000
7.	625.540	-0.000	-0.000	4970.179	-0.266	-0.600	4985.322	.860	0.000
8.	624.992	-0.000	-0.000	4965.851	-0.170	-0.600	4986.664	.860	-0.000
9.	624.287	-0.000	-0.000	4965.667	-0.086	-0.600	4988.009	.860	0.000
10.	623.533	-0.000	-0.000	4965.614	.011	-0.600	4989.354	.860	-0.000
11.	622.702	-0.000	0.000	4965.705	.110	-0.000	4990.699	.860	0.000
12.	622.792	-0.000	-0.000	4965.936	.200	-0.000	4992.041	.860	-0.000
13.	620.805	-0.000	-0.000	4970.395	.290	-0.600	4993.379	.860	0.000
14.	618.741	-0.000	-0.000	4970.811	.380	-0.000	4994.712	.870	0.000
15.	618.607	-0.000	-0.000	4971.452	.470	-0.000	4996.037	.870	0.000
16.	617.355	-0.000	0.000	4972.224	.550	0.000	4997.353	.860	-0.000
17.	616.117	-0.000	-0.000	4973.123	.640	-0.600	4998.659	.850	0.000
18.	614.777	-0.000	-0.000	4974.146	.710	-0.000	4999.953	.850	-0.000
19.	613.375	-0.000	-0.000	4975.289	.790	-0.000	5001.232	.840	0.000
20.	611.915	-0.000	-0.000	4976.547	.860	-0.000	5002.497	.820	0.000
21.	610.403	-0.000	-0.000	4977.905	.936	-0.600	5003.746	.810	0.000
22.	608.842	-0.000	0.000	4979.357	1.000	-0.600	5004.975	.800	-0.000
23.	607.239	-0.000	-0.000	4980.923	1.050	-0.000	5006.184	.790	0.000
24.	605.596	-0.000	-0.000	4982.566	1.110	-0.000	5007.374	.770	0.000
25.	603.921	-0.000	0.000	4984.286	1.160	-0.000	5008.541	.760	0.000
26.	602.210	-0.000	-0.000	4986.076	1.200	-0.000	5009.693	.740	0.000
27.	600.465	-0.000	-0.000	4987.929	1.240	-0.000	5010.800	.720	-0.000
28.	598.755	-0.000	0.000	4989.841	1.270	-0.600	5011.860	.700	0.000
29.	597.002	-0.000	-0.000	4991.779	1.290	-0.000	5012.952	.680	-0.000
30.	595.256	-0.000	-0.000	4993.758	1.310	-0.600	5014.064	.670	0.000
31.	593.504	-0.000	-0.000	4995.762	1.320	-0.000	5014.997	.650	-0.000
32.	591.744	-0.000	0.000	4997.780	1.330	-0.000	5015.957	.630	0.000
33.	589.946	-0.000	-0.000	4999.802	1.330	0.000	5016.894	.600	0.000
34.	588.220	-0.000	0.000	5001.818	1.320	-0.000	5017.798	.580	-0.000
35.	586.666	-0.000	0.000	5003.815	1.310	-0.000	5018.666	.560	0.000
36.	585.029	-0.000	-0.000	5005.795	1.280	-0.000	5019.498	.530	-0.000
37.	583.432	-0.000	-0.000	5007.735	1.250	-0.600	5020.292	.510	0.000
38.	581.882	-0.000	-0.000	5009.630	1.230	-0.000	5021.050	.480	0.000
39.	580.388	-0.000	-0.000	5011.471	1.190	-0.000	5021.767	.450	0.000
40.	578.952	-0.000	0.000	5013.266	1.160	-0.000	5022.445	.430	-0.000
41.	577.522	-0.000	-0.000	5015.015	1.100	-0.000	5023.082	.400	0.000
42.	576.083	-0.000	-0.000	5016.720	1.040	-0.600	5023.678	.380	0.000
43.	574.600	-0.000	-0.000	5018.381	.970	-0.000	5024.231	.350	-0.000
44.	573.091	-0.000	-0.000	5019.997	.910	-0.000	5024.742	.320	0.000
45.	571.661	-0.000	0.000	5021.567	.840	-0.000	5025.205	.280	0.000
46.	570.204	-0.000	-0.000	5023.100	.760	-0.000	5025.632	.260	0.000
47.	568.722	-0.000	0.000	5024.595	.690	-0.000	5026.011	.230	0.000
48.	567.247	-0.000	-0.000	5026.035	.600	-0.600	5026.345	.200	0.000
49.	565.572	-0.000	0.000	5027.400	.520	-0.000	5026.633	.170	0.000

110-PLANE YAG

	LAF112	LAF113	FSWEL	FSF112	FSP113	SSWEL	SSP112	SSP113
50.	8565.002	0.000	5025.821	.430	-0.000	5026.876	.140	0.000
51.	8565.577	-0.000	5026.407	.340	-0.000	5027.073	.110	0.000
52.	8566.100	0.000	5026.866	.250	-0.000	5027.323	.080	0.000
53.	8567.032	-0.000	5027.112	.160	-0.000	5027.527	.050	0.000
54.	8567.799	0.000	5027.350	.080	-0.000	5027.685	.020	-0.000
55.	8567.776	0.000	5027.356	-.010	-0.000	5027.592	-.010	-0.000
56.	8567.854	0.000	5027.282	-.040	0.000	5027.560	-.040	0.000
57.	8568.046	0.000	5027.082	-.210	-0.000	5027.276	-.070	0.000
58.	8568.355	0.000	5026.610	-.330	-0.000	5026.145	-.180	0.000
59.	8568.776	0.000	5026.100	-.350	-0.000	5026.575	-.130	0.000
60.	8569.290	0.000	5025.442	-.460	-0.000	5026.523	-.160	0.000
61.	8569.618	0.000	5025.611	-.520	-0.000	5026.467	-.150	0.000
62.	8570.646	0.000	5025.712	-.650	-0.000	5026.174	-.220	-0.000
63.	8571.471	0.000	5025.656	-.730	-0.000	5025.617	-.280	-0.000
64.	8572.267	0.000	5025.466	-.800	-0.000	5025.414	-.310	0.000
65.	8573.408	0.000	5025.201	-.820	-0.000	5024.968	-.310	0.000
66.	8574.517	0.000	5025.016	-.900	-0.000	5024.474	-.370	-0.000
67.	8575.664	0.000	5019.317	-1.000	-0.000	5023.944	-.360	0.000
68.	8576.960	0.000	5015.712	-1.070	-0.000	5023.565	-.350	0.000
69.	8578.267	0.000	5014.064	-1.120	-0.000	5022.751	-.420	-0.000
70.	8579.703	0.000	5012.336	-1.170	-0.000	5022.092	-.440	0.000
71.	8581.170	0.000	5010.506	-1.210	-0.000	5021.593	-.470	0.000
72.	8582.664	0.000	5008.656	-1.240	-0.000	5021.055	-.500	-0.000
73.	8584.260	0.000	5006.715	-1.270	-0.000	5020.578	-.520	0.000
74.	8585.884	0.000	5004.715	-1.300	-0.000	5020.063	-.540	0.000
75.	8587.545	0.000	5002.765	-1.330	-0.000	5019.525	-.550	-0.000
76.	8589.948	0.000	5000.774	-1.330	-0.000	5018.944	-.510	0.000
77.	8592.682	0.000	4998.712	-1.330	-0.000	5018.409	-.510	0.000
78.	8594.627	0.000	4996.671	-1.330	-0.000	5017.825	-.510	0.000
79.	8596.176	0.000	4994.651	-1.330	-0.000	5017.241	-.500	-0.000
80.	8597.930	0.000	4992.651	-1.320	-0.000	5016.661	-.500	-0.000
81.	8599.920	-0.000	4990.674	-1.280	-0.000	5016.082	-.500	0.000
82.	8601.477	-0.000	4988.692	-1.220	-0.000	5015.512	-.510	0.000
83.	8603.121	0.000	4986.712	-1.130	-0.000	5014.938	-.500	0.000
84.	8604.805	0.000	4984.734	-1.130	-0.000	5014.364	-.500	0.000
85.	8606.468	0.000	4982.751	-1.080	-0.000	5013.791	-.500	0.000
86.	8608.090	0.000	4980.765	-1.020	-0.000	5013.217	-.500	0.000
87.	8609.672	0.000	4978.782	-.950	-0.000	5012.643	-.510	0.000
88.	8611.209	0.000	4976.801	-.880	-0.000	5012.069	-.520	-0.000
89.	8612.693	0.000	4974.817	-.820	-0.000	5011.495	-.520	-0.000
90.	8614.123	0.000	4972.834	-.770	-0.000	5010.921	-.510	0.000
91.	8615.497	0.000	4970.851	-.700	-0.000	5010.347	-.500	0.000
92.	8616.803	-0.000	4968.868	-.650	-0.000	5009.773	-.500	0.000
93.	8618.042	0.000	4966.885	-.590	-0.000	5009.199	-.500	0.000
94.	8619.213	0.000	4964.902	-.530	-0.000	5008.625	-.500	0.000
95.	8620.312	0.000	4962.919	-.480	-0.000	5008.051	-.500	0.000
96.	8621.376	-0.000	4960.936	-.420	-0.000	5007.477	-.500	0.000
97.	8622.423	-0.000	4958.953	-.360	-0.000	5006.903	-.500	0.000
98.	8623.451	-0.000	4956.970	-.300	-0.000	5006.329	-.500	0.000
99.	8624.451	-0.000	4954.987	-.240	-0.000	5005.755	-.500	0.000
			4952.994	-.180	-0.000	5005.181	-.500	0.000
			4951.000	-.120	-0.000	5004.607	-.500	0.000
			4949.000	-.060	-0.000	5004.033	-.500	0.000
			4947.000	.000	-0.000	5003.459	-.500	0.000
			4945.000	.060	-0.000	5002.885	-.500	0.000
			4943.000	.120	-0.000	5002.311	-.500	0.000
			4941.000	.180	-0.000	5001.737	-.500	0.000
			4939.000	.240	-0.000	5001.163	-.500	0.000
			4937.000	.300	-0.000	5000.589	-.500	0.000
			4935.000	.360	-0.000	5000.015	-.500	0.000
			4933.000	.420	-0.000	4999.441	-.500	0.000
			4931.000	.480	-0.000	4998.867	-.500	0.000
			4929.000	.540	-0.000	4998.293	-.500	0.000
			4927.000	.600	-0.000	4997.719	-.500	0.000
			4925.000	.660	-0.000	4997.145	-.500	0.000
			4923.000	.720	-0.000	4996.571	-.500	0.000
			4921.000	.780	-0.000	4995.997	-.500	0.000
			4919.000	.840	-0.000	4995.423	-.500	0.000
			4917.000	.900	-0.000	4994.849	-.500	0.000
			4915.000	.960	-0.000	4994.275	-.500	0.000
			4913.000	1.020	-0.000	4993.701	-.500	0.000
			4911.000	1.080	-0.000	4993.127	-.500	0.000
			4909.000	1.140	-0.000	4992.553	-.500	0.000
			4907.000	1.200	-0.000	4991.979	-.500	0.000
			4905.000	1.260	-0.000	4991.405	-.500	0.000
			4903.000	1.320	-0.000	4990.831	-.500	0.000
			4901.000	1.380	-0.000	4990.257	-.500	0.000
			4899.000	1.440	-0.000	4989.683	-.500	0.000
			4897.000	1.500	-0.000	4989.109	-.500	0.000
			4895.000	1.560	-0.000	4988.535	-.500	0.000
			4893.000	1.620	-0.000	4987.961	-.500	0.000
			4891.000	1.680	-0.000	4987.387	-.500	0.000
			4889.000	1.740	-0.000	4986.813	-.500	0.000
			4887.000	1.800	-0.000	4986.239	-.500	0.000
			4885.000	1.860	-0.000	4985.665	-.500	0.000
			4883.000	1.920	-0.000	4985.091	-.500	0.000
			4881.000	1.980	-0.000	4984.517	-.500	0.000
			4879.000	2.040	-0.000	4983.943	-.500	0.000
			4877.000	2.100	-0.000	4983.369	-.500	0.000
			4875.000	2.160	-0.000	4982.795	-.500	0.000
			4873.000	2.220	-0.000	4982.221	-.500	0.000
			4871.000	2.280	-0.000	4981.647	-.500	0.000
			4869.000	2.340	-0.000	4981.073	-.500	0.000
			4867.000	2.400	-0.000	4980.499	-.500	0.000
			4865.000	2.460	-0.000	4979.925	-.500	0.000
			4863.000	2.520	-0.000	4979.351	-.500	0.000
			4861.000	2.580	-0.000	4978.777	-.500	0.000
			4859.000	2.640	-0.000	4978.203	-.500	0.000
			4857.000	2.700	-0.000	4977.629	-.500	0.000
			4855.000	2.760	-0.000	4977.055	-.500	0.000
			4853.000	2.820	-0.000	4976.481	-.500	0.000
			4851.000	2.880	-0.000	4975.907	-.500	0.000
			4849.000	2.940	-0.000	4975.333	-.500	0.000
			4847.000	3.000	-0.000	4974.759	-.500	0.000
			4845.000	3.060	-0.000	4974.185	-.500	0.000
			4843.000	3.120	-0.000	4973.611	-.500	0.000
			4841.000	3.180	-0.000	4973.037	-.500	0.000
			4839.000	3.240	-0.000	4972.463	-.500	0.000
			4837.000	3.300	-0.000	4971.889	-.500	0.000
			4835.000	3.360	-0.000	4971.315	-.500	0.000
			4833.000	3.420	-0.000	4970.741	-.500	0.000
			4831.000	3.480	-0.000	4970.167	-.500	0.000
			4829.000	3.540	-0.000	4969.593	-.500	0.000
			4827.000	3.600	-0.000	4969.019	-.500	0.000
			4825.000	3.660	-0.000	4968.445	-.500	0.000
			4823.000	3.720	-0.000	4967.871	-.500	0.000
			4821.000	3.780	-0.000	4967.297	-.500	0.000
			4819.000	3.840	-0.000	4966.723	-.500	0.000
			4817.000	3.900	-0.000	4966.149	-.500	0.000
			4815.000	3.960	-0.000	4965.575	-.500	0.000
			4813.000	4.020	-0.000	4964.991	-.500	0.000
			4811.000	4.080	-0.000	4964.417	-.500	0.000
			4809.000	4.140	-0.000	4963.843	-.500	0.000
			4807.000	4.200	-0.000	4963.269	-.500	0.000
			4805.000	4.260	-0.000	4962.695	-.500	0.000
			4803.000	4.320	-0.000	4962.121	-.500	0.000
			4801.000	4.380	-0.000	4961.547	-.500	0.000
			4799.000	4.440	-0.000	4960.973	-.500	0.000
			4797.000	4.500	-0.000	4960.399	-.500	0.000
			4795.000	4.560	-0.000	4959.825	-.500	0.000
			4793.000	4.620	-0.000	4959.251	-.500	0.000
			4791.000	4.680	-0.000	4958.677	-.500	0.000
			4789.000	4.740	-0.000	4958.103	-.500	0.000
			4787.000	4.800	-0.000	4957.529	-.500	0.000
			4785.000	4.860	-0.000	4956.955	-.500	0.000
			4783.000	4.920	-0.000	4956.381	-.500	0.000
			4781.000	4.980	-0.000	4955.807	-.500	0.000
			4779.000	5.040	-0.000	4955.233	-.500	0.000
			4777.000	5.100	-0.000	4954.659	-.500	0.000

110-PLANE YAG

	LAGVEL	LP+112	FSP+112	FSP+112	SSRVEL	FSP+112	SSP+112	SSP+113
100.	PE23.979	.220	FSPVEL	1.030	4988.644	-0.000	0.000	0.000
101.	PE24.647	.260	4966.622	.170	4987.298	-0.000	0.000	0.000
102.	PE25.273	.320	4966.746	.120	4985.555	0.000	0.000	0.000
103.	PE25.817	.350	4970.007	.080	4984.615	-0.000	0.000	0.000
104.	PE26.280	.360	4970.942	.060	4982.279	-0.000	0.000	0.000
105.	PE26.662	.370	4971.611	.050	4981.951	-0.000	0.000	0.000
106.	PE26.964	.380	4972.410	.040	4980.631	-0.000	0.000	0.000
107.	PE27.187	.390	4973.235	.030	4979.320	-0.000	0.000	0.000
108.	PE27.373	.400	4974.082	.020	4978.021	-0.000	0.000	0.000
109.	PE27.504	.410	4975.046	.010	4976.735	-0.000	0.000	0.000
110.	PE27.602	.420	4976.021	.000	4975.464	-0.000	0.000	0.000
111.	PE27.720	.430	4976.900	.000	4974.209	-0.000	0.000	0.000
112.	PE27.850	.440	4977.678	.000	4972.971	-0.000	0.000	0.000
113.	PE28.007	.450	4978.347	.000	4971.752	-0.000	0.000	0.000
114.	PE28.222	.460	4978.906	.000	4970.552	-0.000	0.000	0.000
115.	PE28.401	.470	4979.427	.000	4969.380	-0.000	0.000	0.000
116.	PE28.627	.480	4980.022	.000	4968.225	-0.000	0.000	0.000
117.	PE28.807	.490	4980.677	.000	4967.102	-0.000	0.000	0.000
118.	PE28.976	.500	4981.366	.000	4966.003	-0.000	0.000	0.000
119.	PE29.164	.510	4982.024	.000	4964.930	-0.000	0.000	0.000
120.	PE29.385	.520	4982.656	.000	4963.880	-0.000	0.000	0.000
121.	PE29.511	.530	4983.256	.000	4962.875	-0.000	0.000	0.000
122.	PE29.611	.540	4983.814	.000	4961.894	-0.000	0.000	0.000
123.	PE29.691	.550	4984.315	.000	4960.947	-0.000	0.000	0.000
124.	PE29.755	.560	4984.762	.000	4960.033	-0.000	0.000	0.000
125.	PE29.804	.570	4985.164	.000	4959.154	-0.000	0.000	0.000
126.	PE29.855	.580	4985.523	.000	4958.312	-0.000	0.000	0.000
127.	PE29.901	.590	4985.845	.000	4957.507	-0.000	0.000	0.000
128.	PE29.951	.600	4986.122	.000	4956.741	-0.000	0.000	0.000
129.	PE29.980	.610	4986.354	.000	4956.014	-0.000	0.000	0.000
130.	PE30.000	.620	4986.542	.000	4955.327	-0.000	0.000	0.000
131.	PE30.017	.630	4986.688	.000	4954.681	-0.000	0.000	0.000
132.	PE30.025	.640	4986.793	.000	4954.077	-0.000	0.000	0.000
133.	PE30.025	.650	4986.857	.000	4953.516	-0.000	0.000	0.000
134.	PE30.019	.660	4986.880	.000	4952.992	-0.000	0.000	0.000
135.	PE30.000	.670	4986.860	.000	4952.524	-0.000	0.000	0.000
136.	PE30.000	.680	4986.795	.000	4952.094	-0.000	0.000	0.000
137.	PE30.000	.690	4986.688	.000	4951.710	-0.000	0.000	0.000
138.	PE30.000	.700	4986.537	.000	4951.371	-0.000	0.000	0.000
139.	PE30.000	.710	4986.342	.000	4951.079	-0.000	0.000	0.000
140.	PE30.000	.720	4986.106	.000	4950.832	-0.000	0.000	0.000
141.	PE30.000	.730	4985.832	.000	4950.632	-0.000	0.000	0.000
142.	PE30.000	.740	4985.522	.000	4950.479	-0.000	0.000	0.000
143.	PE30.000	.750	4985.187	.000	4950.374	-0.000	0.000	0.000
144.	PE30.000	.760	4984.826	.000	4950.315	-0.000	0.000	0.000
145.	PE30.000	.770	4984.432	.000	4950.304	-0.000	0.000	0.000
146.	PE30.000	.780	4984.007	.000	4950.340	-0.000	0.000	0.000
147.	PE30.000	.790	4983.552	.000	4950.424	-0.000	0.000	0.000
148.	PE30.000	.800	4983.062	.000	4950.554	-0.000	0.000	0.000
149.	PE30.000	.810	4982.536	.000	4950.732	-0.000	0.000	0.000

110-PLANF YAG

	INQVEL	LEF+112	LEF+113	FSEVEL	FSP+112	FSP+113	SSRQEL	SSP+112	SSP+113
129.	PE12.227	.110	0.000	525.472	-470	0.000	4950.956	.160	0.000
131.	PE13.551	.110	0.000	524.424	-470	0.000	4951.227	.160	0.000
132.	PE13.592	.140	0.000	523.762	-640	0.000	4951.544	.220	0.000
133.	PE14.235	.160	0.000	522.730	-720	0.000	4951.907	.260	0.000
134.	PE14.778	.160	0.000	521.574	-750	0.000	4952.316	.250	0.000
135.	PE15.257	.160	0.000	520.307	-660	0.000	4952.769	.320	0.000
136.	PE15.671	.200	0.000	519.573	-530	0.000	4953.266	.340	0.000
137.	PE16.318	.210	0.000	517.461	-550	0.000	4953.607	.370	0.000
138.	PE16.897	.220	0.000	515.456	-1.050	0.000	4954.291	.400	0.000
139.	PE17.452	.220	0.000	514.247	-1.110	0.000	4955.017	.420	0.000
140.	PE18.112	.240	0.000	512.522	-1.150	0.000	4955.685	.460	0.000
141.	PE18.747	.240	0.000	510.729	-1.150	0.000	4956.392	.420	0.000
142.	PE19.504	.250	0.000	508.877	-1.230	0.000	4957.141	.510	0.000
143.	PE20.046	.250	0.000	506.975	-1.260	0.000	4957.923	.520	0.000
144.	PE20.761	.250	0.000	505.032	-1.250	0.000	4958.752	.560	0.000
145.	PE21.351	.250	0.000	502.058	-1.300	0.000	4959.614	.560	0.000
146.	PE21.952	.240	0.000	501.062	-1.320	0.000	4960.511	.610	0.000
147.	PE22.621	.240	0.000	499.054	-1.320	0.000	4961.447	.630	0.000
148.	PE23.231	.230	0.000	497.043	-1.310	0.000	4962.402	.650	0.000
149.	PE23.817	.220	0.000	495.040	-1.310	0.000	4963.406	.670	0.000
150.	PE24.375	.210	0.000	493.053	-1.300	0.000	4964.434	.650	0.000
151.	PE24.901	.150	0.000	491.052	-1.280	0.000	4965.497	.710	0.000
152.	PE25.384	.150	0.000	489.160	-1.250	0.000	4966.580	.730	0.000
153.	PE25.823	.160	0.000	487.291	-1.220	0.000	4967.694	.740	0.000
154.	PE26.231	.140	0.000	485.467	-1.180	0.000	4968.834	.760	0.000
155.	PE26.577	.120	0.000	483.706	-1.140	0.000	4969.998	.780	0.000
156.	PE26.860	.110	0.000	482.017	-1.090	0.000	4971.185	.750	0.000
157.	PE27.102	.090	0.000	480.467	-1.020	0.000	4972.394	.680	0.000
158.	PE27.272	.050	0.000	478.866	-.970	0.000	4973.622	.620	0.000
159.	PE27.378	.020	0.000	477.455	-.910	0.000	4974.869	.520	0.000
160.	PE27.412	0.000	0.000	476.134	-.840	0.000	4976.133	.440	0.000

Z-PLANE (XY-PLANE) YTTRIUM GALLIUM GARNET									
	LNGVEL	LPM12		LPM13		FSRVEL		FSPM12	
		BULK		BULK		BULK		BULK	
		SSPM12	SSPM13	SSPM12	SSPM13	SSPM12	SSPM13	SSPM12	SSPM13
0.	7000.831	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.	7000.971	.130	0.000	4061.275	0.000	4061.275	0.000	0.000	0.000
2.	7001.390	.260	0.000	4061.031	-.390	0.000	0.000	0.000	0.000
3.	7002.085	.390	0.000	4060.301	-.790	0.000	0.000	0.000	0.000
4.	7003.053	.510	0.000	4059.068	-1.170	0.000	0.000	0.000	0.000
5.	7004.204	.630	0.000	4057.399	-1.560	0.000	0.000	0.000	0.000
6.	7005.763	.750	0.000	4055.242	-1.930	0.000	0.000	0.000	0.000
7.	7007.530	.870	0.000	4052.629	-2.300	0.000	0.000	0.000	0.000
8.	7009.516	.960	0.000	4049.574	-2.650	0.000	0.000	0.000	0.000
9.	7091.730	1.000	0.000	4046.091	-2.990	0.000	0.000	0.000	0.000
10.	7094.176	1.100	0.000	4042.199	-3.320	0.000	0.000	0.000	0.000
11.	7096.820	1.270	0.000	4037.919	-3.630	0.000	0.000	0.000	0.000
12.	7099.654	1.350	0.000	4033.271	-3.920	0.000	0.000	0.000	0.000
13.	7102.663	1.430	0.000	4028.271	-4.190	0.000	0.000	0.000	0.000
14.	7105.832	1.500	0.000	4017.371	-4.450	0.000	0.000	0.000	0.000
15.	7109.144	1.560	0.000	4011.506	-4.660	0.000	0.000	0.000	0.000
16.	7112.580	1.610	0.000	4005.412	-4.890	0.000	0.000	0.000	0.000
17.	7116.124	1.660	0.000	3999.113	-5.070	0.000	0.000	0.000	0.000
18.	7119.756	1.690	0.000	3992.642	-5.230	0.000	0.000	0.000	0.000
19.	7123.454	1.720	0.000	3986.032	-5.370	0.000	0.000	0.000	0.000
20.	7127.214	1.740	0.000	3979.315	-5.480	0.000	0.000	0.000	0.000
21.	7131.001	1.750	0.000	3972.524	-5.560	0.000	0.000	0.000	0.000
22.	7134.802	1.750	0.000	3965.693	-5.620	0.000	0.000	0.000	0.000
23.	7138.599	1.740	0.000	3958.854	-5.640	0.000	0.000	0.000	0.000
24.	7142.373	1.730	0.000	3952.041	-5.650	0.000	0.000	0.000	0.000
25.	7146.107	1.700	0.000	3945.266	-5.620	0.000	0.000	0.000	0.000
26.	7149.781	1.670	0.000	3938.623	-5.570	0.000	0.000	0.000	0.000
27.	7153.380	1.630	0.000	3932.063	-5.490	0.000	0.000	0.000	0.000
28.	7156.886	1.580	0.000	3925.658	-5.360	0.000	0.000	0.000	0.000
29.	7160.284	1.530	0.000	3919.497	-5.250	0.000	0.000	0.000	0.000
30.	7163.558	1.470	0.000	3913.510	-5.090	0.000	0.000	0.000	0.000
31.	7166.693	1.400	0.000	3907.767	-4.910	0.000	0.000	0.000	0.000
32.	7169.675	1.330	0.000	3902.293	-4.700	0.000	0.000	0.000	0.000
33.	7172.491	1.250	0.000	3897.114	-4.460	0.000	0.000	0.000	0.000
34.	7175.166	1.160	0.000	3892.256	-4.220	0.000	0.000	0.000	0.000
35.	7177.576	1.070	0.000	3887.740	-3.950	0.000	0.000	0.000	0.000
36.	7179.823	.960	0.000	3883.569	-3.660	0.000	0.000	0.000	0.000
37.	7181.861	.860	0.000	3879.820	-3.350	0.000	0.000	0.000	0.000
38.	7183.679	.760	0.000	3876.453	-3.020	0.000	0.000	0.000	0.000
39.	7185.270	.670	0.000	3873.502	-2.680	0.000	0.000	0.000	0.000
40.	7186.625	.570	0.000	3870.961	-2.320	0.000	0.000	0.000	0.000
41.	7187.746	.460	0.000	3868.903	-1.950	0.000	0.000	0.000	0.000
42.	7188.623	.340	0.000	3867.276	-1.570	0.000	0.000	0.000	0.000
43.	7189.251	.230	0.000	3866.109	-1.190	0.000	0.000	0.000	0.000
44.	7189.629	.120	0.000	3865.406	-.800	0.000	0.000	0.000	0.000
45.	7189.755	0.000	0.000	3865.172	-.400	0.000	0.000	0.000	0.000
46.	7189.629	-.120	0.000	3865.406	.400	0.000	0.000	0.000	0.000
47.	7189.251	-.230	0.000	3866.109	.790	0.000	0.000	0.000	0.000
48.	7188.623	-.340	0.000	3867.276	1.190	0.000	0.000	0.000	0.000
49.	7187.746	-.460	0.000	3868.903	1.570	0.000	0.000	0.000	0.000

Z-PLANE (XY-PLANE) YTTRIUM GALLIUM GARNET

BULK

	LMGVEL	LPH12	LPH13	FSPVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
58.	7106.629	-1.570	0.000	3870.981	1.950	0.000	4061.275	-0.000	0.000
59.	7105.270	-1.570	0.000	3873.502	2.320	0.000	4061.275	0.000	0.000
60.	7103.879	-1.780	0.000	3876.953	2.660	0.000	4061.275	0.000	0.000
61.	7101.861	-1.860	0.000	3879.820	3.020	0.000	4061.275	-0.000	0.000
62.	7100.023	-1.900	0.000	3883.589	3.350	0.000	4061.275	-0.000	0.000
63.	7107.576	-1.070	0.000	3887.740	3.660	0.000	4061.275	0.000	0.000
64.	7105.128	-1.168	0.000	3892.256	3.950	0.000	4061.275	0.000	0.000
65.	7103.128	-1.250	0.000	3897.114	4.220	0.000	4061.275	0.000	0.000
66.	7101.693	-1.330	0.000	3902.293	4.460	0.000	4061.275	0.000	0.000
67.	7100.693	-1.400	0.000	3907.767	4.700	0.000	4061.275	-0.000	0.000
68.	7100.550	-1.470	0.000	3913.510	4.910	0.000	4061.275	0.000	0.000
69.	7100.284	-1.530	0.000	3919.497	5.090	0.000	4061.275	-0.000	0.000
70.	7100.066	-1.560	0.000	3925.646	5.250	0.000	4061.275	0.000	0.000
71.	7100.000	-1.570	0.000	3932.883	5.360	0.000	4061.275	0.000	0.000
72.	7100.000	-1.570	0.000	3938.823	5.430	0.000	4061.275	0.000	0.000
73.	7100.000	-1.570	0.000	3945.286	5.470	0.000	4061.275	0.000	0.000
74.	7100.000	-1.570	0.000	3952.041	5.620	0.000	4061.275	0.000	0.000
75.	7100.000	-1.570	0.000	3958.854	5.650	0.000	4061.275	0.000	0.000
76.	7100.000	-1.570	0.000	3965.693	5.640	0.000	4061.275	0.000	0.000
77.	7100.000	-1.570	0.000	3972.524	5.620	0.000	4061.275	0.000	0.000
78.	7100.000	-1.570	0.000	3979.315	5.560	0.000	4061.275	0.000	0.000
79.	7100.000	-1.570	0.000	3986.032	5.460	0.000	4061.275	-0.000	0.000
80.	7100.000	-1.570	0.000	3992.642	5.370	0.000	4061.275	0.000	0.000
81.	7100.000	-1.570	0.000	3999.113	5.230	0.000	4061.275	0.000	0.000
82.	7100.000	-1.570	0.000	4005.412	5.070	0.000	4061.275	0.000	0.000
83.	7100.000	-1.570	0.000	4011.506	4.880	0.000	4061.275	0.000	0.000
84.	7100.000	-1.570	0.000	4017.371	4.650	0.000	4061.275	0.000	0.000
85.	7100.000	-1.570	0.000	4022.971	4.450	0.000	4061.275	0.000	0.000
86.	7100.000	-1.570	0.000	4028.280	4.190	0.000	4061.275	0.000	0.000
87.	7100.000	-1.570	0.000	4033.271	3.920	0.000	4061.275	0.000	0.000
88.	7100.000	-1.570	0.000	4037.919	3.630	0.000	4061.275	0.000	0.000
89.	7100.000	-1.570	0.000	4042.199	3.320	0.000	4061.275	0.000	0.000
90.	7100.000	-1.570	0.000	4046.091	2.990	0.000	4061.275	0.000	0.000
91.	7100.000	-1.570	0.000	4049.574	2.650	0.000	4061.275	0.000	0.000
92.	7100.000	-1.570	0.000	4052.629	2.300	0.000	4061.275	-0.000	0.000
93.	7100.000	-1.570	0.000	4055.242	1.930	0.000	4061.275	0.000	0.000
94.	7100.000	-1.570	0.000	4057.399	1.560	0.000	4061.275	0.000	0.000
95.	7100.000	-1.570	0.000	4059.088	1.170	0.000	4061.275	0.000	0.000
96.	7100.000	-1.570	0.000	4060.301	.790	0.000	4061.275	-0.000	0.000
97.	7100.000	-1.570	0.000	4061.031	.390	0.000	4061.275	0.000	0.000
98.	7100.000	-1.570	0.000	4061.275	-0.000	0.000	4061.275	0.000	0.000
99.	7100.000	-1.570	0.000	4061.031	-1.390	0.000	4061.275	0.000	0.000
100.	7100.000	-1.570	0.000	4060.301	-1.790	0.000	4061.275	-0.000	0.000
101.	7100.000	-1.570	0.000	4059.088	-2.170	0.000	4061.275	0.000	0.000
102.	7100.000	-1.570	0.000	4057.399	-2.530	0.000	4061.275	0.000	0.000
103.	7100.000	-1.570	0.000	4055.242	-2.860	0.000	4061.275	0.000	0.000
104.	7100.000	-1.570	0.000	4052.629	-3.160	0.000	4061.275	0.000	0.000
105.	7100.000	-1.570	0.000	4049.574	-3.430	0.000	4061.275	0.000	0.000
106.	7100.000	-1.570	0.000	4046.091	-3.660	0.000	4061.275	0.000	0.000
107.	7100.000	-1.570	0.000	4042.199	-3.850	0.000	4061.275	0.000	0.000
108.	7100.000	-1.570	0.000	4037.919	-4.000	0.000	4061.275	0.000	0.000
109.	7100.000	-1.570	0.000	4033.271	-4.110	0.000	4061.275	0.000	0.000
110.	7100.000	-1.570	0.000	4028.280	-4.180	0.000	4061.275	0.000	0.000
111.	7100.000	-1.570	0.000	4022.971	-4.210	0.000	4061.275	0.000	0.000
112.	7100.000	-1.570	0.000	4017.371	-4.200	0.000	4061.275	0.000	0.000
113.	7100.000	-1.570	0.000	4011.506	-4.160	0.000	4061.275	0.000	0.000
114.	7100.000	-1.570	0.000	4005.412	-4.090	0.000	4061.275	0.000	0.000
115.	7100.000	-1.570	0.000	3999.113	-4.000	0.000	4061.275	0.000	0.000
116.	7100.000	-1.570	0.000	3992.642	-3.890	0.000	4061.275	0.000	0.000
117.	7100.000	-1.570	0.000	3986.032	-3.760	0.000	4061.275	0.000	0.000
118.	7100.000	-1.570	0.000	3979.315	-3.600	0.000	4061.275	0.000	0.000
119.	7100.000	-1.570	0.000	3972.524	-3.420	0.000	4061.275	0.000	0.000
120.	7100.000	-1.570	0.000	3965.693	-3.210	0.000	4061.275	0.000	0.000
121.	7100.000	-1.570	0.000	3958.854	-2.980	0.000	4061.275	0.000	0.000
122.	7100.000	-1.570	0.000	3952.041	-2.730	0.000	4061.275	0.000	0.000
123.	7100.000	-1.570	0.000	3945.286	-2.460	0.000	4061.275	0.000	0.000
124.	7100.000	-1.570	0.000	3938.823	-2.180	0.000	4061.275	0.000	0.000
125.	7100.000	-1.570	0.000	3932.883	-1.890	0.000	4061.275	0.000	0.000
126.	7100.000	-1.570	0.000	3925.646	-1.600	0.000	4061.275	0.000	0.000
127.	7100.000	-1.570	0.000	3919.497	-1.310	0.000	4061.275	0.000	0.000
128.	7100.000	-1.570	0.000	3913.510	-1.020	0.000	4061.275	0.000	0.000
129.	7100.000	-1.570	0.000	3907.767	-0.740	0.000	4061.275	0.000	0.000
130.	7100.000	-1.570	0.000	3902.293	-0.470	0.000	4061.275	0.000	0.000
131.	7100.000	-1.570	0.000	3897.114	-0.210	0.000	4061.275	0.000	0.000
132.	7100.000	-1.570	0.000	3892.256	0.040	0.000	4061.275	0.000	0.000
133.	7100.000	-1.570	0.000	3887.740	0.300	0.000	4061.275	0.000	0.000
134.	7100.000	-1.570	0.000	3883.589	0.560	0.000	4061.275	0.000	0.000
135.	7100.000	-1.570	0.000	3879.820	0.820	0.000	4061.275	0.000	0.000
136.	7100.000	-1.570	0.000	3876.953	1.080	0.000	4061.275	0.000	0.000
137.	7100.000	-1.570	0.000	3873.502	1.340	0.000	4061.275	0.000	0.000
138.	7100.000	-1.570	0.000	3870.981	1.600	0.000	4061.275	0.000	0.000
139.	7100.000	-1.570	0.000	3868.400	1.860	0.000	4061.275	0.000	0.000
140.	7100.000	-1.570	0.000	3865.760	2.120	0.000	4061.275	0.000	0.000
141.	7100.000	-1.570	0.000	3863.060	2.380	0.000	4061.275	0.000	0.000
142.	7100.000	-1.570	0.000	3860.300	2.640	0.000	4061.275	0.000	0.000
143.	7100.000	-1.570	0.000	3857.480	2.900	0.000	4061.275	0.000	0.000
144.	7100.000	-1.570	0.000	3854.600	3.160	0.000	4061.275	0.000	0.000
145.	7100.000	-1.570	0.000	3851.660	3.420	0.000	4061.275	0.000	0.000
146.	7100.000	-1.570	0.000	3848.660	3.680	0.000	4061.275	0.000	0.000
147.	7100.000	-1.570	0.000	3845.600	3.940	0.000	4061.275	0.000	0.000
148.	7100.000	-1.570	0.000	3842.480	4.200	0.000	4061.275	0.000	0.000
149.	7100.000	-1.570	0.000	3839.300	4.460	0.000	4061.275	0.000	0.000
150.	7100.000	-1.570	0.000	3836.060	4.720	0.000	4061.275	0.000	0.000

Z-PLANE (XY-PLANE) YTTRIUM GALLIUM GARNET

BULK

	LHPI12	LHPI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.	7894.176	1.100	4037.919	-3.630	0.000	4061.275	0.000	0.000
101.	7896.820	1.270	4033.271	-3.920	0.000	4061.275	-0.000	0.000
102.	7899.654	1.350	4028.280	-4.190	0.000	4061.275	0.000	0.000
103.	7102.663	1.430	4022.971	-4.450	0.000	4061.275	-0.000	0.000
104.	7105.432	1.500	4017.371	-4.680	0.000	4061.275	0.000	0.000
105.	7109.144	1.560	4011.504	-4.890	0.000	4061.275	0.000	0.000
106.	7112.580	1.610	4005.412	-5.070	0.000	4061.275	0.000	0.000
107.	7116.124	1.660	3999.113	-5.230	0.000	4061.275	0.000	0.000
108.	7119.756	1.690	3992.642	-5.370	0.000	4061.275	0.000	0.000
109.	7123.459	1.720	3986.032	-5.480	0.000	4061.275	0.000	0.000
110.	7127.214	1.750	3979.315	-5.560	0.000	4061.275	-0.000	0.000
111.	7131.001	1.780	3972.524	-5.620	0.000	4061.275	-0.000	0.000
112.	7134.802	1.790	3965.593	-5.640	0.000	4061.275	-0.000	0.000
113.	7138.599	1.740	3958.654	-5.650	0.000	4061.275	0.000	0.000
114.	7142.373	1.730	3952.041	-5.620	0.000	4061.275	-0.000	0.000
115.	7146.107	1.700	3945.286	-5.570	0.000	4061.275	0.000	0.000
116.	7149.781	1.670	3938.623	-5.490	0.000	4061.275	-0.000	0.000
117.	7153.380	1.630	3932.083	-5.380	0.000	4061.275	0.000	0.000
118.	7156.886	1.568	3925.696	-5.250	0.000	4061.275	-0.000	0.000
119.	7160.284	1.530	3919.497	-5.090	0.000	4061.275	0.000	0.000
120.	7163.596	1.470	3913.510	-4.910	0.000	4061.275	0.000	0.000
121.	7166.693	1.400	3907.767	-4.730	0.000	4061.275	0.000	0.000
122.	7169.675	1.330	3902.293	-4.480	0.000	4061.275	0.000	0.000
123.	7172.491	1.250	3897.114	-4.220	0.000	4061.275	0.000	0.000
124.	7175.126	1.160	3892.256	-3.950	0.000	4061.275	0.000	0.000
125.	7177.576	1.070	3887.740	-3.680	0.000	4061.275	0.000	0.000
126.	7179.823	.980	3883.589	-3.350	0.000	4061.275	0.000	0.000
127.	7181.861	.880	3879.820	-3.020	0.000	4061.275	0.000	0.000
128.	7183.679	.780	3876.453	-2.680	0.000	4061.275	-0.000	0.000
129.	7185.270	.670	3873.582	-2.320	0.000	4061.275	0.000	0.000
130.	7186.629	.570	3870.581	-1.950	0.000	4061.275	0.000	0.000
131.	7187.746	.468	3868.903	-1.570	0.000	4061.275	-0.000	0.000
132.	7188.623	.340	3867.276	-1.190	0.000	4061.275	0.000	0.000
133.	7189.251	.230	3866.109	-.790	0.000	4061.275	0.000	0.000
134.	7189.629	.120	3865.406	0.000	0.000	4061.275	-0.000	0.000
135.	7189.755	-.000	3865.172	.400	0.000	4061.275	0.000	0.000
136.	7189.629	-.120	3865.406	.790	0.000	4061.275	0.000	0.000
137.	7189.251	-.230	3866.109	1.190	0.000	4061.275	0.000	0.000
138.	7188.623	-.340	3867.276	1.570	0.000	4061.275	-0.000	0.000
139.	7187.746	-.468	3868.903	1.950	0.000	4061.275	0.000	0.000
140.	7186.629	-.570	3870.581	2.320	0.000	4061.275	0.000	0.000
141.	7185.270	-.670	3873.582	2.680	0.000	4061.275	-0.000	0.000
142.	7183.679	-.780	3876.453	3.020	0.000	4061.275	0.000	0.000
143.	7181.861	-.880	3879.820	3.350	0.000	4061.275	-0.000	0.000
144.	7179.823	-.980	3883.589	3.680	0.000	4061.275	0.000	0.000
145.	7177.576	-1.070	3887.740	3.950	0.000	4061.275	0.000	0.000
146.	7175.126	-1.160	3892.256	4.220	0.000	4061.275	0.000	0.000
147.	7172.491	-1.250	3897.114	4.480	0.000	4061.275	-0.000	0.000
148.	7169.675	-1.330	3902.293	4.730	0.000	4061.275	0.000	0.000
149.	7166.693	-1.400	3907.767	4.910	0.000	4061.275	-0.000	0.000

Z-PLANE (XY-PLANE) YTTRIUM GALLIUM GARNET									
	LPHI2		LPHI3		FSRVEL		FSPHI2		BULK
	LPHI2	LPHI3	FSRVEL	FSPHI2	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
150.	7163.556	-1.470	0.000	3913.510	4.910	0.000	4061.275	0.000	0.000
151.	7160.264	-1.530	0.000	3919.497	5.090	0.000	4061.275	0.000	0.000
152.	7156.866	-1.580	0.000	3925.696	5.250	0.000	4061.275	0.000	0.000
153.	7153.380	-1.630	0.000	3932.083	5.380	0.000	4061.275	0.000	0.000
154.	7149.741	-1.670	0.000	3938.623	5.490	0.000	4061.275	0.000	0.000
155.	7146.107	-1.700	0.000	3945.266	5.570	0.000	4061.275	0.000	0.000
156.	7142.373	-1.730	0.000	3952.041	5.620	0.000	4061.275	0.000	0.000
157.	7138.599	-1.748	0.000	3958.854	5.650	0.000	4061.275	0.000	0.000
158.	7134.802	-1.758	0.000	3965.693	5.640	0.000	4061.275	0.000	0.000
159.	7131.001	-1.750	0.000	3972.524	5.620	0.000	4061.275	0.000	0.000
160.	7127.214	-1.740	0.000	3979.315	5.560	0.000	4061.275	0.000	0.000
161.	7123.459	-1.720	0.000	3986.032	5.480	0.000	4061.275	0.000	0.000
162.	7119.756	-1.690	0.000	3992.642	5.370	0.000	4061.275	0.000	0.000
163.	7116.124	-1.660	0.000	3999.113	5.230	0.000	4061.275	0.000	0.000
164.	7112.500	-1.610	0.000	4005.412	5.070	0.000	4061.275	0.000	0.000
165.	7109.144	-1.560	0.000	4011.504	4.890	0.000	4061.275	0.000	0.000
166.	7105.832	-1.500	0.000	4017.371	4.660	0.000	4061.275	0.000	0.000
167.	7102.663	-1.430	0.000	4022.971	4.450	0.000	4061.275	0.000	0.000
168.	7099.654	-1.350	0.000	4028.250	4.190	0.000	4061.275	0.000	0.000
169.	7096.820	-1.270	0.000	4033.271	3.920	0.000	4061.275	0.000	0.000
170.	7094.176	-1.180	0.000	4037.919	3.630	0.000	4061.275	0.000	0.000
171.	7091.736	-1.080	0.000	4042.199	3.320	0.000	4061.275	0.000	0.000
172.	7089.510	-980	0.000	4046.091	2.990	0.000	4061.275	0.000	0.000
173.	7087.530	-870	0.000	4049.574	2.650	0.000	4061.275	0.000	0.000
174.	7085.783	-750	0.000	4052.659	2.300	0.000	4061.275	0.000	0.000
175.	7084.268	-630	0.000	4055.242	1.930	0.000	4061.275	0.000	0.000
176.	7083.053	-510	0.000	4057.399	1.560	0.000	4061.275	0.000	0.000
177.	7082.045	-390	0.000	4059.066	1.170	0.000	4061.275	0.000	0.000
178.	7081.390	-260	0.000	4060.301	.790	0.000	4061.275	0.000	0.000
179.	7080.971	-130	0.000	4061.031	.390	0.000	4061.275	0.000	0.000
180.	7080.631	0.000	0.000	4061.275	-0.000	0.000	4061.275	0.000	0.000

111-PLANE YTTRIUM GALLIUM GARNET

	LNGL	LP112	LP113	FSRVEL	FSP112	FSP113	SSRVEL	SSP112	SSP113
0.	7189.755	-0.000	0.000	4061.275	-0.000	0.000	3665.172	0.000	-0.000
1.	7189.758	0.000	0.000	4061.157	-0.190	-0.140	3665.291	0.000	-0.190
2.	7189.766	0.010	0.170	4060.602	-0.360	-0.270	3665.647	0.000	-0.200
3.	7189.780	0.010	0.250	4060.213	-0.570	-0.400	3666.240	0.000	-0.410
4.	7189.799	0.010	0.330	4059.592	-0.760	-0.540	3667.067	0.000	-0.570
5.	7189.824	0.010	0.410	4058.340	-0.940	-0.670	3668.124	0.000	-0.690
6.	7189.853	0.010	0.490	4057.064	-1.120	-0.800	3669.439	1.100	-0.820
7.	7189.887	0.020	0.570	4055.566	-1.300	-1.030	3670.915	1.370	-1.050
8.	7189.925	0.020	0.650	4053.854	-1.470	-1.260	3672.637	1.650	-1.280
9.	7189.967	0.020	0.720	4051.935	-1.640	-1.490	3674.568	1.920	-1.510
10.	7190.012	0.020	0.790	4049.815	-1.800	-1.720	3676.700	2.200	-1.740
11.	7190.060	0.020	0.870	4047.504	-1.950	-1.950	3679.023	2.480	-1.970
12.	7190.111	0.020	0.930	4045.013	-2.090	-2.180	3681.540	2.760	-2.200
13.	7190.163	0.020	1.000	4042.352	-2.220	-2.410	3684.232	3.040	-2.430
14.	7190.216	0.020	1.060	4039.536	-2.350	-2.540	3687.132	3.320	-2.660
15.	7190.270	0.020	1.120	4036.576	-2.460	-2.630	3690.005	3.600	-2.890
16.	7190.324	0.020	1.180	4033.494	-2.550	-2.720	3693.102	3.880	-3.120
17.	7190.377	0.020	1.230	4030.305	-2.630	-2.810	3696.306	4.160	-3.350
18.	7190.429	0.020	1.290	4027.032	-2.690	-2.900	3699.593	4.440	-3.580
19.	7190.479	0.020	1.330	4023.699	-2.730	-2.990	3702.939	4.720	-3.810
20.	7190.527	0.020	1.380	4020.336	-2.750	-3.080	3706.340	5.000	-4.040
21.	7190.573	0.020	1.420	4016.976	-2.730	-3.170	3709.800	5.280	-4.270
22.	7190.614	0.020	1.450	4013.666	-2.690	-3.260	3713.320	5.560	-4.500
23.	7190.653	0.010	1.480	4010.450	-2.630	-3.350	3716.900	5.840	-4.730
24.	7190.686	0.010	1.510	4007.390	-2.550	-3.440	3720.540	6.120	-4.960
25.	7190.716	0.010	1.530	4004.558	-2.460	-3.530	3724.240	6.400	-5.190
26.	7190.740	0.010	1.550	4002.040	-2.350	-3.620	3728.000	6.680	-5.420
27.	7190.760	0.010	1.570	3999.924	-2.230	-3.710	3731.820	6.960	-5.650
28.	7190.773	0.010	1.580	3998.320	-2.100	-3.800	3735.700	7.240	-5.880
29.	7190.782	0.000	1.590	3997.320	0.000	-3.890	3739.640	7.520	-6.110
30.	7190.785	-0.000	1.590	3996.976	0.000	-3.980	3743.640	7.800	-6.340
31.	7190.782	-0.000	1.590	3997.320	0.000	-4.070	3747.700	8.080	-6.570
32.	7190.773	-0.010	1.580	3998.320	1.000	-4.160	3751.820	8.360	-6.800
33.	7190.760	-0.010	1.570	3999.924	1.500	-4.250	3755.990	8.640	-7.030
34.	7190.740	-0.010	1.550	4002.040	2.000	-4.340	3760.220	8.920	-7.260
35.	7190.716	-0.010	1.530	4004.556	2.500	-4.430	3764.510	9.200	-7.490
36.	7190.686	-0.010	1.510	4007.390	2.990	-4.520	3768.860	9.480	-7.720
37.	7190.653	-0.020	1.480	4010.450	3.480	-4.610	3773.270	9.760	-7.950
38.	7190.614	-0.020	1.450	4013.666	3.970	-4.700	3777.740	10.040	-8.180
39.	7190.573	-0.020	1.420	4016.976	4.460	-4.790	3782.270	10.320	-8.410
40.	7190.527	-0.020	1.380	4020.336	4.950	-4.880	3786.860	10.600	-8.640
41.	7190.479	-0.020	1.330	4023.699	5.440	-4.970	3791.510	10.880	-8.870
42.	7190.429	-0.020	1.290	4027.032	5.930	-5.060	3796.220	11.160	-9.100
43.	7190.377	-0.020	1.230	4030.305	6.420	-5.150	3800.990	11.440	-9.330
44.	7190.324	-0.020	1.180	4033.494	6.910	-5.240	3805.820	11.720	-9.560
45.	7190.270	-0.020	1.120	4036.576	7.400	-5.330	3810.710	12.000	-9.790
46.	7190.216	-0.020	1.060	4039.536	7.890	-5.420	3815.660	12.280	-10.020
47.	7190.163	-0.020	1.000	4042.352	8.380	-5.510	3820.670	12.560	-10.250
48.	7190.111	-0.020	0.930	4045.013	8.870	-5.600	3825.740	12.840	-10.480
49.	7190.060	-0.020	0.870	4047.504	9.360	-5.690	3830.870	13.120	-10.710

BULK

111-PLANE YTTRIUM GALLIUM GARNET

	LNGLVL	LPM112	LPM113	FSRVEL	FSPM112	FSPM113	SSRVEL	SSPM112	SSPM113
50.	7190.012	-.020	.790	4049.815	1.800	-1.290	3876.700	-1.890	-1.320
51.	7189.967	-.020	.720	4051.935	1.040	-1.170	3674.568	-1.720	-1.260
52.	7189.925	-.020	.650	4053.454	1.470	-1.050	3672.637	-1.550	-1.000
53.	7189.867	-.020	.570	4055.566	1.300	-.930	3670.915	-1.370	-.940
54.	7189.853	-.010	.490	4057.084	1.120	-.800	3669.499	-1.180	-.820
55.	7189.824	-.010	.410	4058.340	.940	-.670	3668.124	-.990	-.690
56.	7189.799	-.010	.330	4059.392	.760	-.540	3667.067	-.800	-.550
57.	7189.780	-.010	.250	4060.213	.570	-.400	3666.240	-.600	-.410
58.	7189.766	-.010	.170	4060.602	.360	-.270	3665.647	-.400	-.240
59.	7189.750	-.000	.080	4061.157	.190	-.140	3665.291	-.200	-.140
60.	7189.755	0.000	0.000	4061.275	-.000	0.000	3665.172	-.000	-.000
61.	7189.758	0.000	-.080	4061.157	-.190	.140	3665.291	.200	.140
62.	7189.766	0.010	-.170	4060.802	-.380	.270	3665.647	.400	.240
63.	7189.780	0.010	-.250	4060.213	-.570	.400	3666.240	.600	.410
64.	7189.799	0.010	-.330	4059.392	-.760	.540	3667.067	.800	.550
65.	7189.824	0.010	-.410	4058.340	-.940	.670	3668.124	.990	.690
66.	7189.853	0.010	-.490	4057.084	-1.120	.800	3669.499	1.180	.820
67.	7189.887	0.020	-.570	4055.566	-1.300	.930	3670.915	1.370	.940
68.	7189.925	0.020	-.650	4053.454	-1.470	1.050	3672.637	1.550	1.000
69.	7189.967	0.020	-.720	4051.935	-1.640	1.170	3674.568	1.720	1.260
70.	7190.012	0.020	-.790	4049.815	-1.800	1.290	3767.700	1.890	1.320
71.	7190.060	0.020	-.870	4047.504	-1.950	1.410	3671.023	1.640	1.440
72.	7190.111	0.020	-.930	4045.013	-2.090	1.520	3681.528	2.190	1.550
73.	7190.163	0.020	-1.000	4042.352	-2.220	1.630	3684.202	2.330	1.660
74.	7190.216	0.020	-1.060	4039.536	-2.350	1.740	3687.032	2.450	1.760
75.	7190.270	0.020	-1.120	4036.576	-2.460	1.830	3691.005	2.560	1.860
76.	7190.324	0.020	-1.180	4033.494	-2.560	1.930	3693.102	2.660	1.960
77.	7190.377	0.020	-1.230	4030.305	-2.630	2.020	3696.306	2.740	2.040
78.	7190.429	0.020	-1.290	4027.032	-2.690	2.100	3699.593	2.790	2.130
79.	7190.479	0.020	-1.330	4023.695	-2.730	2.180	3902.939	2.830	2.210
80.	7190.527	0.020	-1.380	4020.336	-2.750	2.260	3906.315	2.840	2.280
81.	7190.573	0.020	-1.420	4016.977	-2.730	2.320	3909.085	2.810	2.330
82.	7190.619	0.020	-1.450	4013.665	-2.660	2.380	3913.008	2.750	2.390
83.	7190.653	0.020	-1.480	4010.450	-2.560	2.440	3916.234	2.650	2.440
84.	7190.687	0.010	-1.510	4007.390	-2.420	2.490	3919.533	2.460	2.470
85.	7190.716	0.010	-1.530	4004.556	-2.260	2.530	3922.142	2.260	2.520
86.	7190.740	0.010	-1.550	4002.040	-1.910	2.560	3924.667	1.990	2.550
87.	7190.760	0.010	-1.570	3999.929	-1.540	2.590	3926.763	1.570	2.570
88.	7190.774	0.010	-1.580	3998.326	-1.060	2.610	3928.390	1.100	2.590
89.	7190.782	0.000	-1.590	3997.320	-.560	2.620	3929.742	.570	2.590
90.	7190.785	-0.000	-1.590	3996.976	.560	2.630	3929.742	-0.560	2.590
91.	7190.782	-0.010	-1.590	3996.326	1.060	2.610	3928.390	-1.100	2.590
92.	7190.774	-0.010	-1.570	3998.929	1.540	2.590	3926.763	-1.570	2.570
93.	7190.760	-0.010	-1.550	4002.040	1.910	2.560	3924.667	-1.990	2.550
94.	7190.740	-0.010	-1.530	4004.556	2.260	2.530	3922.142	-2.260	2.520
95.	7190.716	-0.010	-1.510	4007.390	2.420	2.490	3919.533	-2.460	2.470
96.	7190.687	-0.010	-1.480	4010.450	2.560	2.440	3916.234	-2.650	2.440
97.	7190.653	-0.020	-1.450	4013.665	2.660	2.380	3913.008	-2.750	2.390
98.	7190.619	-0.020	-1.420	4016.977	2.730	2.320	3909.085	-2.810	2.330
99.	7190.573	-0.020	-1.380	4020.336	2.750	2.260	3906.315	-2.840	2.280

111-PLANE YTTRIUM GALLIUM GARNET

BULK

	LPH12	LPH13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
100.								
101.	-0.00	-1.380	4030.336	2.750	2.360	3906.315	-2.640	2.210
102.	-0.00	-1.330	4033.699	2.730	2.120	3902.599	-2.630	2.200
103.	-0.00	-1.290	4027.032	2.690	2.100	3899.593	-2.750	2.130
104.	-0.00	-1.230	4030.305	2.630	2.020	3896.306	-2.740	2.040
105.	-0.00	-1.180	4033.494	2.550	1.930	3893.102	-2.660	1.900
106.	-0.00	-1.120	4036.576	2.460	1.830	3890.005	-2.560	1.760
107.	-0.00	-1.060	4039.536	2.310	1.740	3887.032	-2.450	1.700
108.	-0.00	-1.000	4042.352	2.220	1.630	3884.202	-2.330	1.600
109.	-0.00	-0.936	4045.013	2.090	1.520	3881.526	-2.190	1.500
110.	-0.00	-0.870	4047.504	1.950	1.410	3879.023	-2.040	1.400
111.	-0.00	-0.790	4049.815	1.800	1.290	3876.700	-1.890	1.320
112.	-0.00	-0.720	4051.935	1.640	1.170	3874.568	-1.740	1.200
113.	-0.00	-0.650	4053.854	1.470	1.050	3872.537	-1.590	1.080
114.	-0.00	-0.570	4055.566	1.300	0.930	3870.515	-1.430	0.920
115.	-0.00	-0.490	4057.064	1.120	0.800	3868.509	-1.260	0.800
116.	-0.00	-0.410	4058.346	0.940	0.670	3866.524	-1.090	0.690
117.	-0.00	-0.330	4059.392	0.760	0.540	3864.567	-0.900	0.590
118.	-0.00	-0.250	4060.213	0.570	0.400	3862.640	-0.700	0.410
119.	-0.00	-0.170	4060.802	0.360	0.270	3860.747	-0.490	0.290
120.	-0.00	-0.080	4061.157	0.150	0.140	3858.881	-0.280	0.140
121.	0.000	0.000	4061.275	0.000	0.000	3857.042	0.000	0.000
122.	0.000	0.000	4061.157	-0.130	-0.140	3855.231	-0.200	-0.140
123.	0.000	0.170	4060.802	-0.360	-0.270	3853.467	-0.400	-0.200
124.	0.000	0.250	4060.213	-0.570	-0.400	3851.740	-0.600	-0.310
125.	0.000	0.330	4059.392	-0.760	-0.540	3849.967	-0.800	-0.490
126.	0.000	0.410	4058.340	-0.940	-0.670	3848.124	-1.000	-0.690
127.	0.000	0.490	4057.064	-1.120	-0.800	3846.209	-1.200	-0.920
128.	0.000	0.570	4055.566	-1.300	-0.930	3844.202	-1.370	-1.000
129.	0.000	0.650	4053.854	-1.470	-1.050	3842.102	-1.530	-1.080
130.	0.000	0.720	4051.935	-1.640	-1.170	3840.005	-1.690	-1.160
131.	0.000	0.790	4049.815	-1.800	-1.290	3837.902	-1.840	-1.240
132.	0.000	0.870	4047.504	-1.950	-1.410	3835.809	-1.990	-1.320
133.	0.000	0.930	4045.013	-2.090	-1.520	3833.726	-2.140	-1.400
134.	0.000	1.000	4042.352	-2.220	-1.630	3831.652	-2.290	-1.480
135.	0.000	1.060	4039.536	-2.350	-1.740	3829.585	-2.440	-1.560
136.	0.000	1.120	4036.576	-2.460	-1.830	3827.533	-2.590	-1.640
137.	0.000	1.180	4033.494	-2.550	-1.930	3825.493	-2.740	-1.720
138.	0.000	1.230	4030.305	-2.630	-2.020	3823.466	-2.890	-1.800
139.	0.000	1.290	4027.032	-2.690	-2.100	3821.442	-3.040	-1.880
140.	0.000	1.330	4023.699	-2.730	-2.160	3819.424	-3.190	-1.960
141.	0.000	1.380	4020.336	-2.750	-2.200	3817.406	-3.340	-2.040
142.	0.000	1.420	4016.976	-2.730	-2.220	3815.388	-3.490	-2.120
143.	0.000	1.450	4013.666	-2.680	-2.280	3813.368	-3.640	-2.200
144.	0.000	1.480	4010.450	-2.560	-2.360	3811.346	-3.790	-2.280
145.	0.000	1.510	4007.250	-2.420	-2.440	3809.323	-3.940	-2.360
146.	0.000	1.530	4004.058	-2.200	-2.530	3807.303	-4.090	-2.440
147.	0.000	1.550	4000.840	-1.910	-2.560	3805.282	-4.240	-2.520
148.	0.000	1.570	3999.529	-1.540	-2.590	3803.263	-4.390	-2.600
149.	0.000	1.590	3998.326	-1.080	-2.610	3801.244	-4.540	-2.680
150.	0.000	1.590	3997.320	-0.560	-2.620	3800.226	-4.690	-2.760

111-PLANE YTTRIUM GALLIUM GARNET

BULK

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
150.	7190.765	0.000	1.590	3996.976	-0.000	-2.630	3929.742	-0.000	-2.600
151.	7190.762	-0.000	1.590	3997.320	.560	-2.620	3929.398	-.570	-2.590
152.	7190.773	-.010	1.590	3998.326	1.080	-2.610	3929.390	-1.100	-2.580
153.	7190.760	-.010	1.570	3999.929	1.540	-2.590	3929.703	-1.570	-2.570
154.	7190.740	-.010	1.550	4002.040	1.910	-2.560	3929.667	-1.930	-2.560
155.	7190.716	-.010	1.530	4004.556	2.260	-2.530	3922.142	-2.280	-2.540
156.	7190.686	-.010	1.510	4007.390	2.420	-2.490	3919.303	-2.440	-2.400
157.	7190.653	-.020	1.480	4010.450	2.560	-2.440	3916.234	-2.650	-2.400
158.	7190.614	-.020	1.450	4013.666	2.660	-2.360	3913.008	-2.770	-2.330
159.	7190.573	-.020	1.420	4016.976	2.730	-2.320	3909.805	-2.810	-2.330
160.	7190.527	-.020	1.380	4020.336	2.750	-2.260	3906.315	-2.840	-2.270
161.	7190.479	-.020	1.330	4023.695	2.730	-2.190	3902.934	-2.830	-2.200
162.	7190.429	-.020	1.290	4027.032	2.640	-2.100	3899.593	-2.790	-2.130
163.	7190.377	-.020	1.230	4030.305	2.630	-2.020	3896.306	-2.740	-2.050
164.	7190.324	-.020	1.180	4033.494	2.550	-1.930	3893.102	-2.660	-1.960
165.	7190.270	-.020	1.120	4036.576	2.460	-1.830	3890.005	-2.560	-1.860
166.	7190.216	-.020	1.060	4039.536	2.350	-1.740	3887.032	-2.430	-1.760
167.	7190.163	-.020	1.000	4042.352	2.220	-1.630	3884.202	-2.330	-1.660
168.	7190.111	-.020	.930	4045.013	2.090	-1.520	3881.528	-2.190	-1.570
169.	7190.060	-.020	.870	4047.504	1.950	-1.410	3879.123	-2.040	-1.460
170.	7190.012	-.020	.790	4049.815	1.800	-1.290	3876.700	-1.890	-1.320
171.	7189.967	-.020	.720	4051.935	1.640	-1.170	3874.566	-1.740	-1.240
172.	7189.925	-.020	.650	4053.854	1.470	-1.050	3872.637	-1.590	-1.160
173.	7189.887	-.020	.570	4055.566	1.300	-.930	3870.915	-1.370	-1.080
174.	7189.853	-.010	.490	4057.064	1.120	-.800	3869.409	-1.160	-.920
175.	7189.824	-.010	.410	4058.340	.940	-.670	3868.124	-.950	-.840
176.	7189.799	-.010	.330	4059.392	.760	-.540	3867.067	-.800	-.760
177.	7189.766	-.010	.250	4060.213	.570	-.400	3866.240	-.660	-.610
178.	7189.736	-.010	.170	4060.802	.380	-.270	3865.647	-.400	-.420
179.	7189.706	-0.000	.080	4061.157	.190	-.140	3865.241	-.200	-.340
180.	7189.755	0.000	-0.000	4061.275	-0.000	-0.000	3865.172	0.000	.000

110-PLANE YTTRIUM GALLIUM GARNET

	LNGVEL	LPM112	LPM113	FSRVEL	FSPM112	FSPM113	SSRVEL	SSPM112	SSPM113
0.	7225.698	0.000	0.000	3331.626	2.710	-0.000	3331.625	-2.710	-0.000
1.	7225.612	-0.000	-0.000	3334.896	2.740	0.000	3326.512	-2.450	-0.000
2.	7225.351	-1.160	-0.000	3336.206	2.761	0.000	3325.680	-2.240	0.000
3.	7224.909	-2.240	-0.000	3341.534	2.790	0.000	3323.146	-1.990	-0.000
4.	7224.284	-3.330	-0.000	3344.892	2.800	0.000	3320.522	-1.730	-0.000
5.	7223.470	-4.410	-0.000	3348.272	2.820	0.000	3319.010	-1.460	-0.000
6.	7222.467	-5.500	-0.000	3351.664	2.830	0.000	3317.444	-1.160	-0.000
7.	7221.271	-6.550	-0.000	3355.076	2.830	0.000	3316.207	-869	-0.000
8.	7219.863	-7.600	-0.000	3358.495	2.830	0.000	3315.315	-600	-0.000
9.	7218.301	-8.760	-0.000	3361.917	2.830	0.000	3314.770	-310	-0.000
10.	7216.526	-9.850	-0.000	3365.339	2.830	0.000	3314.577	-20	-0.000
11.	7214.561	-10.940	-0.000	3368.757	2.820	0.000	3314.736	260	-0.000
12.	7212.407	-12.020	-0.000	3372.167	2.810	0.000	3315.247	580	-0.000
13.	7210.067	-13.110	-0.000	3375.564	2.800	0.000	3316.106	1070	-0.000
14.	7207.545	-14.190	-0.000	3378.945	2.780	-0.000	3317.316	1560	-0.000
15.	7204.847	-15.270	-0.000	3382.306	2.760	-0.000	3318.604	1440	-0.000
16.	7201.977	-16.350	-0.000	3385.642	2.730	0.000	3320.747	1110	-0.000
17.	7198.943	-17.420	-0.000	3388.949	2.710	0.000	3322.956	1900	-0.000
18.	7195.751	-18.490	-0.000	3392.224	2.680	0.000	3325.474	2240	-0.000
19.	7192.410	-19.560	0.000	3395.463	2.640	0.000	3328.337	2460	-0.000
20.	7188.928	-20.620	-0.000	3398.661	2.610	-0.000	3331.425	2720	-0.000
21.	7185.315	-21.660	-0.000	4001.815	2.570	0.000	3334.820	2940	-0.000
22.	7181.580	-22.730	-0.000	4004.922	2.520	-0.000	3338.475	3150	-0.000
23.	7177.736	-23.760	-0.000	4007.977	2.460	-0.000	3342.373	3340	-0.000
24.	7173.794	-24.780	-0.000	4010.977	2.430	0.000	3346.496	3510	-0.000
25.	7169.765	-25.790	-0.000	4013.910	2.380	-0.000	3350.823	3670	-0.000
26.	7165.664	-26.790	-0.000	4016.798	2.330	0.000	3355.336	3810	-0.000
27.	7161.502	-27.780	-0.000	4019.612	2.270	0.000	3360.011	3930	-0.000
28.	7157.295	-28.750	-0.000	4022.357	2.210	0.000	3364.827	4030	-0.000
29.	7153.057	-29.700	-0.000	4025.030	2.150	0.000	3369.760	4110	-0.000
30.	7148.802	-30.630	-0.000	4027.624	2.090	0.000	3374.766	4180	-0.000
31.	7144.545	-31.550	0.000	4030.145	2.020	-0.000	3379.800	4240	-0.000
32.	7140.303	-32.460	0.000	4032.569	1.950	0.000	3384.819	4290	-0.000
33.	7136.091	-33.360	0.000	4034.944	1.880	0.000	3389.816	4340	-0.000
34.	7131.925	-34.240	0.000	4037.214	1.810	-0.000	3394.793	4380	-0.000
35.	7127.821	-35.110	0.000	4039.394	1.730	0.000	4000.743	4410	-0.000
36.	7123.795	-35.970	-0.000	4041.482	1.660	-0.000	4005.703	4440	-0.000
37.	7119.862	-36.820	0.000	4043.477	1.580	0.000	4010.678	4460	-0.000
38.	7115.939	-37.660	0.000	4045.375	1.500	-0.000	4015.546	4480	-0.000
39.	7112.042	-38.490	0.000	4047.175	1.420	0.000	4020.400	4500	-0.000
40.	7108.286	-39.310	-0.000	4048.874	1.340	-0.000	4025.247	4520	-0.000
41.	7104.565	-40.120	-0.000	4050.471	1.250	0.000	4030.084	4540	-0.000
42.	7100.879	-40.920	-0.000	4051.963	1.170	0.000	4034.827	4560	-0.000
43.	7097.227	-41.700	0.000	4053.350	1.080	0.000	4039.476	4580	-0.000
44.	7093.617	-42.470	-0.000	4054.629	.990	-0.000	4044.040	4600	-0.000
45.	7089.947	-43.230	-0.000	4055.799	.900	0.000	4048.527	4620	-0.000
46.	7086.313	-43.980	-0.000	4056.858	.810	0.000	4052.945	4640	-0.000
47.	7082.725	-44.710	-0.000	4057.806	.720	0.000	4057.314	4660	-0.000
48.	7079.179	-45.430	-0.000	4058.641	.630	0.000	4061.641	4680	-0.000
49.	7085.576	-46.140	-0.000	4059.363	.540	-0.000	4065.925	4700	-0.000

BULK

110-PLANE YTTRIUM GALLIUM GARNET

	LPH12	LPH13	FSRVEL	FSPH12	FSPH13	BULK	SSPH12	SSPH13
50.	-800	0.000	4059.970	.440	0.000	4057.552	1.390	0.000
51.	-400	0.000	4060.462	.350	0.000	4056.700	1.110	0.000
52.	-350	0.000	4060.835	.260	0.000	4055.090	.620	0.000
53.	-220	0.000	4061.095	.160	-0.000	4054.710	.520	0.000
54.	-100	0.000	4061.243	.070	-0.000	4061.175	.170	0.000
55.	.030	0.000	4061.262	-.020	-0.000	4061.271	-.120	0.000
56.	.160	0.000	4061.152	-.120	-0.000	4060.375	-.360	0.000
57.	.290	0.000	4060.976	-.210	0.000	4060.326	-.660	0.000
58.	.420	0.000	4060.695	-.310	0.000	4059.306	-.570	0.000
59.	.550	0.000	4060.217	-.400	0.000	4057.927	-1.260	0.000
60.	.670	0.000	4059.664	-.490	0.000	4056.193	-1.540	-0.000
61.	.750	0.000	4058.996	-.590	0.000	4054.116	-1.820	0.000
62.	.900	-0.000	4058.214	-.680	-0.000	4051.705	-2.500	0.000
63.	1.020	0.000	4057.320	-.770	-0.000	4048.373	-2.340	0.000
64.	1.120	-0.000	4056.333	-.860	-0.000	4045.935	-2.560	0.000
65.	1.220	0.000	4055.195	-.950	-0.000	4042.607	-2.420	0.000
66.	1.320	0.000	4053.967	-1.040	0.000	4039.006	-3.030	0.000
67.	1.410	0.000	4052.631	-1.130	0.000	4035.150	-3.230	0.000
68.	1.500	-0.000	4051.189	-1.210	0.000	4031.060	-3.420	0.000
69.	1.570	0.000	4049.641	-1.300	0.000	4026.756	-3.560	0.000
70.	1.640	0.000	4047.990	-1.380	-0.000	4022.261	-3.740	0.000
71.	1.710	0.000	4046.237	-1.460	0.000	4017.596	-3.670	0.000
72.	1.760	0.000	4044.385	-1.540	-0.000	4012.791	-3.560	0.000
73.	1.810	0.000	4042.436	-1.620	-0.000	4007.063	-4.070	-0.000
74.	1.860	0.000	4040.391	-1.700	0.000	4002.540	-4.140	0.000
75.	1.890	0.000	4038.254	-1.770	-0.000	3997.247	-4.230	0.000
76.	1.920	0.000	4036.026	-1.850	0.000	3992.809	-4.230	0.000
77.	1.940	0.000	4033.711	-1.920	0.000	3987.452	-4.240	0.000
78.	1.950	0.000	4031.311	-1.990	-0.000	3982.302	-4.230	0.000
79.	1.950	-0.000	4028.826	-2.050	0.000	3977.163	-4.200	0.000
80.	1.950	0.000	4026.266	-2.120	-0.000	3972.122	-4.150	0.000
81.	1.940	0.000	4023.628	-2.190	0.000	3967.142	-4.070	0.000
82.	1.930	0.000	4020.916	-2.260	-0.000	3962.260	-3.960	-0.000
83.	1.910	0.000	4018.134	-2.300	-0.000	3957.524	-3.570	0.000
84.	1.880	0.000	4015.259	-2.350	0.000	3952.952	-3.740	0.000
85.	1.840	-0.000	4012.373	-2.410	-0.000	3948.514	-3.590	0.000
86.	1.800	0.000	4009.400	-2.460	0.000	3944.292	-3.420	0.000
87.	1.760	0.000	4006.370	-2.500	0.000	3940.285	-3.440	0.000
88.	1.700	0.000	4003.288	-2.550	-0.000	3936.514	-3.440	0.000
89.	1.650	0.000	4000.156	-2.590	0.000	3932.994	-2.830	0.000
90.	1.590	0.000	3996.976	-2.630	-0.000	3929.743	-2.600	0.000
91.	1.520	0.000	3993.756	-2.660	0.000	3926.777	-2.360	0.000
92.	1.450	0.000	3990.499	-2.690	0.000	3924.106	-2.100	0.000
93.	1.380	0.000	3987.207	-2.720	-0.000	3921.750	-1.640	0.000
94.	1.310	0.000	3983.864	-2.750	0.000	3919.712	-1.270	0.000
95.	1.230	-0.000	3980.534	-2.770	-0.000	3916.005	-1.290	0.000
96.	1.150	-0.000	3977.163	-2.790	0.000	3916.635	-1.080	0.000
97.	1.060	0.000	3973.712	-2.800	0.000	3915.810	-.710	0.000
98.	.980	0.000	3970.368	-2.820	0.000	3914.333	-.420	0.000
99.	.890	-0.000	3966.993	-2.830	-0.000	3914.608	-.130	0.000

110-PLANE YTTRIUM GALLIUM GARNET									
	LNGVEL	LPHI12	LPHI13	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13	
100.	7217.487	.600	-0.000	3863.533	0.000	3814.635	.170	-0.000	
101.	7219.160	.720	0.000	3860.110	-2.630	3915.014	.460	-0.000	
102.	7220.640	.630	0.000	3956.690	-2.630	3915.743	.760	-0.000	
103.	7221.927	.540	0.000	3953.276	-2.630	3916.018	1.040	-0.000	
104.	7223.021	.450	0.000	3949.873	-2.820	3916.233	1.330	-0.000	
105.	7223.923	.370	0.000	3946.465	-2.610	3916.363	1.600	-0.000	
106.	7224.637	.260	0.000	3943.116	-2.790	3922.057	1.860	-0.000	
107.	7225.165	.200	0.000	3939.770	-2.770	3924.446	2.130	-0.000	
108.	7225.511	.120	0.000	3936.452	-2.750	3927.139	2.370	-0.000	
109.	7225.679	.040	0.000	3933.165	-2.730	3930.122	2.610	-0.000	
110.	7225.674	-.040	0.000	3929.913	-2.700	3933.362	2.830	-0.000	
111.	7225.503	-.110	0.000	3926.701	-2.670	3936.903	3.040	-0.000	
112.	7225.172	-.190	0.000	3923.532	-2.630	3940.086	3.230	-0.000	
113.	7224.688	-.250	0.000	3920.412	-2.590	3944.656	3.410	-0.000	
114.	7224.060	-.320	0.000	3917.342	-2.550	3946.856	3.570	-0.000	
115.	7223.296	-.360	0.000	3914.326	-2.500	3953.241	3.710	-0.000	
116.	7222.404	-.430	0.000	3911.373	-2.450	3957.792	3.830	-0.000	
117.	7221.195	-.460	0.000	3908.462	-2.400	3962.468	3.940	-0.000	
118.	7220.276	-.530	0.000	3905.656	-2.340	3967.306	4.020	-0.000	
119.	7219.064	-.576	0.000	3902.901	-2.290	3972.224	4.090	-0.000	
120.	7217.763	-.610	0.000	3900.219	-2.220	3977.218	4.140	-0.000	
121.	7216.368	-.640	0.000	3897.615	-2.160	3982.264	4.170	-0.000	
122.	7214.346	-.670	0.000	3895.051	-2.090	3987.330	4.180	-0.000	
123.	7213.457	-.680	0.000	3892.651	-2.020	3992.416	4.180	-0.000	
124.	7211.926	-.760	0.000	3890.297	-1.950	3997.474	4.130	-0.000	
125.	7210.366	-.710	0.000	3888.033	-1.870	4002.466	4.060	-0.000	
126.	7208.790	-.720	0.000	3885.862	-1.790	4007.431	4.010	-0.000	
127.	7207.205	-.720	0.000	3883.787	-1.710	4012.283	3.920	-0.000	
128.	7205.636	-.710	0.000	3881.810	-1.630	4017.119	3.810	-0.000	
129.	7204.063	-.700	0.000	3879.933	-1.540	4021.916	3.680	-0.000	
130.	7202.559	-.690	0.000	3878.160	-1.460	4026.652	3.540	-0.000	
131.	7201.076	-.660	0.000	3876.492	-1.370	4030.306	3.360	-0.000	
132.	7199.645	-.640	0.000	3874.932	-1.280	4034.357	3.200	-0.000	
133.	7198.283	-.610	0.000	3873.462	-1.180	4038.185	3.010	-0.000	
134.	7196.990	-.570	0.000	3872.143	-1.090	4041.772	2.810	-0.000	
135.	7195.760	-.530	0.000	3870.916	-.940	4045.049	2.590	-0.000	
136.	7194.661	-.490	0.000	3869.807	-.850	4048.052	2.360	-0.000	
137.	7193.640	-.440	0.000	3868.813	-.750	4050.814	2.120	-0.000	
138.	7192.727	-.390	0.000	3867.937	-.690	4053.372	1.860	-0.000	
139.	7191.926	-.340	0.000	3867.180	-.590	4055.515	1.600	-0.000	
140.	7191.244	-.260	0.000	3866.542	-.490	4057.331	1.330	-0.000	
141.	7190.686	-.230	0.000	3866.025	-.390	4058.812	1.060	-0.000	
142.	7190.256	-.170	0.000	3865.630	-.280	4059.951	.780	-0.000	
143.	7189.997	-.110	0.000	3865.356	-.180	4060.741	.500	-0.000	
144.	7189.791	-.050	0.000	3865.205	-.060	4061.179	.210	-0.000	
145.	7189.759	.000	0.000	3865.176	.030	4061.263	-.060	-0.000	
146.	7189.662	.080	0.000	3865.269	.130	4060.992	-.360	-0.000	
147.	7190.099	.140	0.000	3865.465	.240	4060.367	-.650	-0.000	
148.	7190.467	.200	0.000	3865.623	.340	4059.573	-.930	-0.000	
149.	7190.965	.260	0.000	3866.283	.440	4058.073	-1.210	-0.000	

110-PLANE YTTRIUM GALLIUM GARNET

	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
150.	7191.589	.310	0.000	3866.664	.540	0.000	4026.414	-1.480	0.000
151.	7192.334	.370	0.000	3867.565	.650	0.000	4056.424	-1.740	0.000
152.	7193.195	.420	0.000	3868.385	.750	0.000	4056.113	-2.000	0.000
153.	7194.166	.470	0.000	3869.323	.850	0.000	4043.492	-2.250	0.000
154.	7195.240	.510	0.000	3870.379	.940	0.000	4043.575	-2.400	0.000
155.	7196.406	.550	0.000	3871.550	1.040	0.000	4035.904	-2.710	0.000
156.	7197.663	.590	0.000	3872.836	1.140	0.000	4035.904	-2.520	0.000
157.	7198.996	.620	0.000	3874.234	1.230	0.000	4036.193	-3.120	0.000
158.	7200.396	.650	0.000	3875.742	1.320	0.000	4036.245	-3.300	0.000
159.	7201.854	.680	0.000	3877.359	1.410	0.000	4028.084	-3.470	0.000
160.	7203.359	.690	0.000	3879.083	1.500	0.000	4023.731	-3.620	0.000
161.	7204.900	.710	0.000	3880.911	1.590	0.000	4013.207	-3.750	0.000
162.	7206.465	.720	0.000	3882.841	1.670	0.000	4014.534	-3.870	0.000
163.	7208.044	.720	0.000	3884.871	1.760	0.000	4005.734	-3.970	0.000
164.	7209.623	.720	0.000	3886.997	1.840	0.000	4004.630	-4.050	0.000
165.	7211.152	.710	0.000	3889.217	1.910	0.000	3993.067	-4.110	0.000
166.	7212.739	.700	0.000	3891.529	1.990	0.000	3994.607	-4.150	0.000
167.	7214.250	.680	0.000	3893.929	2.060	0.000	3989.736	-4.170	0.000
168.	7215.716	.650	0.000	3896.413	2.130	0.000	3986.657	-4.170	0.000
169.	7217.123	.620	0.000	3898.980	2.190	0.000	3974.525	-4.160	0.000
170.	7218.460	.590	0.000	3901.626	2.260	0.000	3974.525	-4.120	0.000
171.	7219.716	.550	0.000	3904.347	2.320	0.000	3969.617	-4.060	0.000
172.	7220.860	.510	0.000	3907.139	2.370	0.000	3964.749	-3.960	0.000
173.	7221.942	.460	0.000	3910.000	2.430	0.000	3959.992	-3.860	0.000
174.	7222.890	.400	0.000	3912.926	2.480	0.000	3955.370	-3.770	0.000
175.	7223.716	.350	0.000	3915.913	2.530	0.000	3950.904	-3.640	0.000
176.	7224.409	.280	0.000	3918.956	2.570	0.000	3946.615	-3.460	0.000
177.	7224.962	.220	0.000	3922.053	2.610	0.000	3942.524	-3.310	0.000
178.	7225.366	.150	0.000	3925.200	2.650	0.000	3938.650	-3.130	0.000
179.	7225.614	.080	0.000	3928.392	2.680	0.000	3935.013	-2.930	0.000
180.	7225.698	0.000	0.000	3931.625	2.710	0.000	3931.626	-2.710	0.000

BULK

Z-PLANE (XY-PLANE) YIG									
	LPMI12	LPMI13	FSRVEL	FSPMI12	FSPMI13	BULK			
						SSRVEL	SSPMI12	SSPMI13	
0.	7213.246	0.000	3844.160	0.000	0.000	3644.160	0.000	SSPMI13	
1.	7213.183	-0.060	3844.160	-0.006	0.000	3644.283	0.210	SSPMI12	
2.	7212.986	-0.120	3844.160	0.000	0.000	3844.651	.420	0.000	
3.	7212.680	-0.160	3844.160	0.000	0.000	3645.283	.630	0.000	
4.	7212.086	-0.240	3844.160	0.000	0.000	3646.115	.830	0.000	
5.	7211.825	-0.250	3844.160	0.000	0.000	3647.204	1.030	0.000	
6.	7210.920	-0.350	3844.160	0.000	0.000	3848.525	1.820	0.000	
7.	7210.095	-0.400	3844.160	0.000	0.000	3650.071	1.410	0.000	
8.	7209.153	-0.450	3844.160	0.000	0.000	3651.036	1.590	0.000	
9.	7208.996	-0.510	3844.160	0.000	0.000	3653.007	1.770	0.000	
10.	7208.936	-0.550	3844.160	0.000	0.000	3655.960	1.930	0.000	
11.	7208.672	-0.600	3844.160	0.000	0.000	3658.342	2.050	0.000	
12.	7204.311	-0.640	3844.160	0.000	0.000	3660.662	2.230	0.000	
13.	7202.660	-0.620	3844.160	0.000	0.000	3663.569	2.370	0.000	
14.	7201.325	-0.720	3844.160	-0.006	0.000	3666.446	2.450	0.000	
15.	7199.114	-0.750	3844.160	0.000	0.000	3669.447	2.600	0.000	
16.	7198.935	-0.760	3844.160	0.000	0.000	3672.571	2.690	0.000	
17.	7196.594	-0.810	3844.160	-0.000	0.000	3675.905	2.700	0.000	
18.	7194.500	-0.830	3844.160	0.000	0.000	3679.133	2.650	0.000	
19.	7192.663	-0.650	3844.160	0.000	0.000	3682.540	2.910	0.000	
20.	7190.789	-0.860	3844.160	0.000	0.000	3685.006	2.500	0.000	
21.	7188.885	-0.670	3844.160	0.000	0.000	3689.552	2.560	0.000	
22.	7186.372	-0.600	3844.160	0.000	0.000	3693.363	2.590	0.000	
23.	7185.047	-0.660	3844.160	0.000	0.000	3696.615	2.550	0.000	
24.	7183.123	-0.880	3844.160	0.000	0.000	3900.161	2.570	0.000	
25.	7181.210	-0.760	3844.160	0.000	0.000	3903.603	2.540	0.000	
26.	7179.316	-0.860	3844.160	0.000	0.000	3907.104	2.500	0.000	
27.	7177.653	-0.840	3844.160	0.000	0.000	3910.566	2.640	0.000	
28.	7175.827	-0.620	3844.160	-0.000	0.000	3913.934	2.770	0.000	
29.	7173.850	-0.600	3844.160	-0.000	0.000	3917.191	2.590	0.000	
30.	7172.129	-0.770	3844.160	-0.000	0.000	3920.341	2.550	0.000	
31.	7170.474	-0.710	3844.160	0.000	0.000	3923.367	2.480	0.000	
32.	7168.993	-0.710	3844.160	0.000	0.000	3926.256	2.350	0.000	
33.	7167.393	-0.710	3844.160	0.000	0.000	3929.593	2.220	0.000	
34.	7165.983	-0.670	3844.160	0.000	0.000	3931.564	2.070	0.000	
35.	7164.670	-0.620	3844.160	0.000	0.000	3933.957	1.920	0.000	
36.	7163.460	-0.530	3844.160	0.000	0.000	3936.180	1.750	0.000	
37.	7162.360	-0.337	3844.160	0.000	0.000	3938.181	1.560	0.000	
38.	7161.375	-0.420	3844.160	0.000	0.000	3941.951	1.440	0.000	
39.	7160.511	-0.370	3844.160	0.000	0.000	3941.521	1.210	0.000	
40.	7159.772	-0.310	3844.160	-0.000	0.000	3942.063	1.020	0.000	
41.	7159.162	-0.250	3844.160	0.000	0.000	3943.971	.620	0.000	
42.	7158.685	-0.150	3844.160	0.000	0.000	3946.038	.620	0.000	
43.	7158.342	-0.130	3844.160	0.000	0.000	3945.460	.420	0.000	
44.	7158.135	-0.060	3844.160	0.000	0.000	3945.835	.210	0.000	
45.	7158.066	0.000	3844.160	0.000	0.000	3946.960	0.000	0.000	
46.	7158.135	-0.060	3844.160	0.000	0.000	3945.835	-0.210	0.000	
47.	7158.342	-0.130	3844.160	0.000	0.000	3945.460	-.420	0.000	
48.	7158.685	-0.150	3844.160	0.000	0.000	3944.038	-0.620	0.000	
49.	7159.162	-0.250	3844.160	0.000	0.000	3943.971	-.620	0.000	

Z-PLANE (XY-PLANE) YIG

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
50.	7159.772	.310	0.000	3844.160	-0.000	0.000	3942.063	-1.020	0.000
51.	7160.511	.370	0.000	3844.160	0.000	0.000	3941.221	-1.210	0.000
52.	7161.375	.420	0.000	3844.160	0.000	0.000	3943.951	-1.600	0.000
53.	7162.360	.480	0.000	3844.160	0.000	0.000	3938.161	-1.560	0.000
54.	7163.460	.530	0.000	3844.160	0.000	0.000	3936.160	-1.750	0.000
55.	7164.670	.560	0.000	3844.160	0.000	0.000	3933.957	-1.520	0.000
56.	7165.983	.620	0.000	3844.160	0.000	0.000	3931.564	-2.170	0.000
57.	7167.393	.670	0.000	3844.160	0.000	0.000	3928.993	-2.220	0.000
58.	7168.893	.710	0.000	3844.160	-0.000	0.000	3926.256	-2.350	0.000
59.	7170.474	.740	0.000	3844.160	-0.000	0.000	3923.367	-2.460	0.000
60.	7172.129	.770	0.000	3844.160	0.000	0.000	3920.341	-2.590	0.000
61.	7173.850	.800	0.000	3844.160	0.000	0.000	3917.191	-2.680	0.000
62.	7175.627	.820	0.000	3844.160	-0.000	0.000	3913.934	-2.770	0.000
63.	7177.453	.840	0.000	3844.160	0.000	0.000	3910.566	-2.840	0.000
64.	7179.316	.860	0.000	3844.160	0.000	0.000	3907.164	-2.900	0.000
65.	7181.210	.870	0.000	3844.160	0.000	0.000	3903.683	-2.940	0.000
66.	7183.123	.880	0.000	3844.160	0.000	0.000	3900.161	-2.970	0.000
67.	7185.047	.890	0.000	3844.160	0.000	0.000	3896.615	-2.990	0.000
68.	7186.972	.900	0.000	3844.160	0.000	0.000	3893.063	-2.990	0.000
69.	7188.885	.910	0.000	3844.160	-0.000	0.000	3889.522	-2.960	0.000
70.	7190.789	.920	0.000	3844.160	-0.000	0.000	3886.008	-2.950	0.000
71.	7192.663	.930	0.000	3844.160	-0.000	0.000	3882.540	-2.910	0.000
72.	7194.500	.940	0.000	3844.160	-0.000	0.000	3879.133	-2.850	0.000
73.	7196.294	.950	0.000	3844.160	0.000	0.000	3875.805	-2.780	0.000
74.	7198.035	.960	0.000	3844.160	0.000	0.000	3872.571	-2.690	0.000
75.	7199.714	.970	0.000	3844.160	-0.000	0.000	3869.447	-2.600	0.000
76.	7201.325	.980	0.000	3844.160	0.000	0.000	3866.446	-2.490	0.000
77.	7202.860	.990	0.000	3844.160	0.000	0.000	3863.569	-2.370	0.000
78.	7204.311	.990	0.000	3844.160	-0.000	0.000	3860.842	-2.230	0.000
79.	7205.672	.990	0.000	3844.160	-0.000	0.000	3858.342	-2.090	0.000
80.	7206.936	.990	0.000	3844.160	0.000	0.000	3855.980	-1.930	0.000
81.	7208.096	.990	0.000	3844.160	0.000	0.000	3853.807	-1.770	0.000
82.	7209.153	.990	0.000	3844.160	0.000	0.000	3851.834	-1.590	0.000
83.	7210.095	.990	0.000	3844.160	0.000	0.000	3850.071	-1.410	0.000
84.	7210.920	.990	0.000	3844.160	-0.000	0.000	3848.525	-1.220	0.000
85.	7211.629	.990	0.000	3844.160	-0.000	0.000	3847.204	-1.030	0.000
86.	7212.206	.990	0.000	3844.160	-0.000	0.000	3846.115	-.830	0.000
87.	7212.660	.990	0.000	3844.160	-0.000	0.000	3845.263	-.630	0.000
88.	7212.986	.990	0.000	3844.160	0.000	0.000	3844.651	-.420	0.000
89.	7213.183	.990	0.000	3844.160	0.000	0.000	3844.283	-.210	0.000
90.	7213.246	.990	0.000	3844.160	0.000	0.000	3844.160	0.000	0.000
91.	7213.183	.990	0.000	3844.160	0.000	0.000	3844.283	.210	0.000
92.	7212.986	.990	0.000	3844.160	0.000	0.000	3844.651	.420	0.000
93.	7212.660	.990	0.000	3844.160	0.000	0.000	3845.263	.630	0.000
94.	7212.206	.990	0.000	3844.160	0.000	0.000	3846.115	.830	0.000
95.	7211.625	.990	0.000	3844.160	0.000	0.000	3847.204	1.030	0.000
96.	7210.920	.990	0.000	3844.160	0.000	0.000	3848.525	1.220	0.000
97.	7210.095	.990	0.000	3844.160	-0.000	0.000	3850.071	1.410	0.000
98.	7209.153	.990	0.000	3844.160	-0.000	0.000	3851.834	1.590	0.000
99.	7208.096	.990	0.000	3844.160	-0.000	0.000	3853.807	1.770	0.000

2-PLANE (XY-PLANE) YIG

BULK

	LNGVEL	LPMI12	LPMI13	FSRVEL	FSPMI12	FSPMI13	SSRVEL	SSPMI12	SSPMI13
100.	7206.936	-550	0.000	3844.160	-0.000	0.000	3855.900	1.530	0.000
101.	7205.672	-560	0.000	3844.160	-0.000	0.000	3856.342	2.090	0.000
102.	7204.311	-540	0.000	3844.160	0.000	0.000	3860.682	2.230	0.000
103.	7202.060	-560	0.000	3844.160	0.000	0.000	3863.569	2.370	0.000
104.	7201.325	-720	0.000	3844.160	-0.000	0.000	3866.448	2.490	0.000
105.	7199.714	-750	0.000	3844.160	0.000	0.000	3869.447	2.600	0.000
106.	7198.035	-780	0.000	3844.160	0.000	0.000	3872.571	2.690	0.000
107.	7196.294	-510	0.000	3844.160	-0.000	0.000	3875.885	2.780	0.000
108.	7194.500	-530	0.000	3844.160	0.000	0.000	3879.133	2.850	0.000
109.	7192.663	-550	0.000	3844.160	0.000	0.000	3882.540	2.910	0.000
110.	7190.765	-560	0.000	3844.160	0.000	0.000	3886.088	2.950	0.000
111.	7188.869	-570	0.000	3844.160	0.000	0.000	3889.722	2.980	0.000
112.	7186.972	-580	0.000	3844.160	0.000	0.000	3893.463	2.990	0.000
113.	7185.047	-560	0.000	3844.160	0.000	0.000	3896.615	2.990	0.000
114.	7183.123	-580	0.000	3844.160	-0.000	0.000	3900.161	2.970	0.000
115.	7181.210	-570	0.000	3844.160	0.000	0.000	3903.683	2.940	0.000
116.	7179.316	-560	0.000	3844.160	0.000	0.000	3907.164	2.900	0.000
117.	7177.453	-540	0.000	3844.160	0.000	0.000	3910.506	2.840	0.000
118.	7175.627	-520	0.000	3844.160	-0.000	0.000	3913.734	2.770	0.000
119.	7173.850	-500	0.000	3844.160	0.000	0.000	3917.191	2.680	0.000
120.	7172.129	-770	0.000	3844.160	0.000	0.000	3920.341	2.590	0.000
121.	7170.474	-740	0.000	3844.160	0.000	0.000	3923.367	2.480	0.000
122.	7168.653	-710	0.000	3844.160	0.000	0.000	3926.256	2.350	0.000
123.	7167.393	-670	0.000	3844.160	0.000	0.000	3928.993	2.220	0.000
124.	7165.983	-620	0.000	3844.160	-0.000	0.000	3931.564	2.070	0.000
125.	7164.670	-560	0.000	3844.160	0.000	0.000	3933.957	1.920	0.000
126.	7163.460	-530	0.000	3844.160	0.000	0.000	3936.160	1.750	0.000
127.	7162.360	-480	0.000	3844.160	0.000	0.000	3938.161	1.560	0.000
128.	7161.375	-420	0.000	3844.160	-0.000	0.000	3939.951	1.430	0.000
129.	7160.511	-370	0.000	3844.160	0.000	0.000	3941.521	1.210	0.000
130.	7159.772	-310	0.000	3844.160	0.000	0.000	3942.863	1.020	0.000
131.	7159.162	-250	0.000	3844.160	0.000	0.000	3943.971	.820	0.000
132.	7158.685	-190	0.000	3844.160	0.000	0.000	3944.936	.620	0.000
133.	7158.342	-130	0.000	3844.160	-0.000	0.000	3945.760	.420	0.000
134.	7158.135	-60	0.000	3844.160	0.000	0.000	3946.460	.210	0.000
135.	7158.066	-0.000	0.000	3844.160	0.000	0.000	3946.960	.000	0.000
136.	7158.135	-60	0.000	3844.160	-0.000	0.000	3947.335	.210	0.000
137.	7158.342	-130	0.000	3844.160	0.000	0.000	3947.560	.420	0.000
138.	7158.685	-190	0.000	3844.160	0.000	0.000	3947.638	.620	0.000
139.	7159.162	-250	0.000	3844.160	-0.000	0.000	3947.571	.820	0.000
140.	7159.772	-310	0.000	3844.160	0.000	0.000	3947.263	1.020	0.000
141.	7160.511	-370	0.000	3844.160	0.000	0.000	3946.721	1.210	0.000
142.	7161.375	-420	0.000	3844.160	-0.000	0.000	3945.951	1.400	0.000
143.	7162.360	-480	0.000	3844.160	0.000	0.000	3944.961	1.580	0.000
144.	7163.460	-530	0.000	3844.160	0.000	0.000	3943.835	1.750	0.000
145.	7164.670	-580	0.000	3844.160	0.000	0.000	3942.504	1.920	0.000
146.	7165.983	-620	0.000	3844.160	0.000	0.000	3941.000	2.070	0.000
147.	7167.393	-670	0.000	3844.160	0.000	0.000	3938.993	2.220	0.000
148.	7168.993	-710	0.000	3844.160	-0.000	0.000	3936.256	2.350	0.000
149.	7170.474	-740	0.000	3844.160	-0.000	0.000	3933.367	2.480	0.000

Z-PLANE (XY-PLANE) YIG										BULK		
	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13			
158.	7172.129	.770	0.000	3844.160	-0.000	0.000	3923.341	-2.554	0.000			
151.	7173.850	.600	0.000	3844.160	0.000	0.000	3917.141	-2.684	0.000			
152.	7175.627	.820	0.000	3844.160	0.000	0.000	3913.934	-2.770	0.000			
153.	7177.453	.640	0.000	3844.160	0.000	0.000	3910.586	-2.840	0.000			
154.	7179.316	.860	0.000	3844.160	0.000	0.000	3907.104	-2.900	0.000			
155.	7181.210	.670	0.000	3844.160	0.000	0.000	3903.683	-2.943	0.000			
156.	7183.123	.890	0.000	3844.160	-0.000	0.000	3900.161	-2.970	0.000			
157.	7185.047	.880	0.000	3844.160	0.000	0.000	3896.615	-2.990	0.000			
158.	7186.972	.690	0.000	3844.160	-0.000	0.000	3893.063	-2.990	0.000			
159.	7188.899	.870	0.000	3844.160	0.000	0.000	3889.522	-2.990	0.000			
160.	7190.789	.660	0.000	3844.160	-0.000	0.000	3886.006	-2.990	0.000			
161.	7192.663	.850	0.000	3844.160	0.000	0.000	3882.540	-2.990	0.000			
162.	7194.500	.630	0.000	3844.160	-0.000	0.000	3879.133	-2.990	0.000			
163.	7196.294	.810	0.000	3844.160	0.000	0.000	3875.685	-2.970	0.000			
164.	7198.035	.790	0.000	3844.160	0.000	0.000	3872.271	-2.940	0.000			
165.	7199.714	.750	0.000	3844.160	0.000	0.000	3868.847	-2.890	0.000			
166.	7201.325	.720	0.000	3844.160	0.000	0.000	3865.446	-2.840	0.000			
167.	7202.860	.680	0.000	3844.160	0.000	0.000	3862.059	-2.770	0.000			
168.	7204.311	.640	0.000	3844.160	0.000	0.000	3858.682	-2.690	0.000			
169.	7205.672	.600	0.000	3844.160	-0.000	0.000	3855.342	-2.600	0.000			
170.	7206.936	.550	0.000	3844.160	0.000	0.000	3852.000	-2.500	0.000			
171.	7208.096	.510	0.000	3844.160	-0.000	0.000	3848.687	-2.400	0.000			
172.	7209.153	.450	0.000	3844.160	-0.000	0.000	3845.334	-2.300	0.000			
173.	7210.095	.400	0.000	3844.160	0.000	0.000	3842.071	-2.200	0.000			
174.	7210.920	.350	0.000	3844.160	-0.000	0.000	3840.525	-2.120	0.000			
175.	7211.625	.290	0.000	3844.160	0.000	0.000	3847.204	-2.030	0.000			
176.	7212.206	.240	0.000	3844.160	-0.000	0.000	3846.115	-1.930	0.000			
177.	7212.660	.180	0.000	3844.160	0.000	0.000	3846.263	-1.830	0.000			
178.	7212.986	.120	0.000	3844.160	-0.000	0.000	3844.641	-1.720	0.000			
179.	7213.183	.060	0.000	3844.160	0.000	0.000	3844.253	-1.620	0.000			
180.	7213.248	-0.000	0.000	3844.160	0.000	0.000	3844.160	0.000	0.000			

111-PLANE YIG

BULK

	LNGVEL	LPM12	LPM13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	7150.066	-0.000	0.000	3945.960	0.000	0.000	3844.160	-0.000	0.000
1.	7150.067	0.000	-0.000	3945.898	-0.000	0.070	3844.222	0.110	0.000
2.	7150.069	0.000	-0.000	3945.712	-0.210	0.150	3844.409	0.210	0.150
3.	7150.073	0.000	-0.130	3945.402	-0.310	0.220	3844.720	0.320	0.230
4.	7150.078	0.000	-0.160	3944.971	-0.410	0.290	3845.153	0.420	0.300
5.	7150.084	0.000	-0.220	3944.418	-0.510	0.370	3845.707	0.520	0.370
6.	7150.092	0.000	-0.260	3943.748	-0.610	0.440	3846.361	0.620	0.440
7.	7150.101	0.000	-0.300	3942.961	-0.700	0.510	3847.171	0.720	0.520
8.	7150.111	0.000	-0.340	3942.061	-0.800	0.580	3848.074	0.820	0.590
9.	7150.122	0.010	-0.380	3941.052	-0.890	0.640	3849.087	0.910	0.650
10.	7150.134	0.010	-0.420	3939.937	-0.970	0.710	3850.206	1.000	0.720
11.	7150.147	0.010	-0.460	3938.721	-1.050	0.770	3851.426	1.080	0.780
12.	7150.160	0.010	-0.500	3937.410	-1.130	0.830	3852.742	1.160	0.840
13.	7150.174	0.010	-0.530	3936.009	-1.200	0.890	3854.148	1.230	0.900
14.	7150.188	0.010	-0.570	3934.525	-1.270	0.950	3855.637	1.300	0.960
15.	7150.202	0.010	-0.600	3932.965	-1.330	1.000	3857.201	1.360	1.010
16.	7150.216	0.010	-0.630	3931.336	-1.360	1.060	3858.833	1.410	1.070
17.	7150.230	0.010	-0.660	3929.654	-1.430	1.100	3860.523	1.460	1.110
18.	7150.244	0.010	-0.690	3927.922	-1.460	1.150	3862.259	1.490	1.160
19.	7150.257	0.010	-0.710	3926.157	-1.490	1.190	3864.026	1.510	1.200
20.	7150.270	0.010	-0.730	3924.374	-1.500	1.230	3865.817	1.520	1.240
21.	7150.282	0.010	-0.750	3922.565	-1.490	1.270	3867.606	1.510	1.270
22.	7150.293	0.000	-0.770	3920.824	-1.460	1.300	3869.374	1.480	1.310
23.	7150.303	0.000	-0.790	3919.106	-1.410	1.330	3871.095	1.430	1.330
24.	7150.312	0.000	-0.800	3917.466	-1.330	1.360	3872.739	1.350	1.360
25.	7150.320	0.000	-0.820	3915.983	-1.220	1.380	3874.265	1.230	1.350
26.	7150.326	0.000	-0.830	3914.562	-1.060	1.400	3875.826	1.070	1.390
27.	7150.331	0.000	-0.830	3913.436	-0.850	1.410	3876.775	0.860	1.410
28.	7150.335	0.000	-0.840	3912.562	-0.600	1.420	3877.650	0.610	1.420
29.	7150.337	0.000	-0.840	3912.012	-0.310	1.430	3878.202	0.320	1.420
30.	7150.338	0.000	-0.850	3911.824	-0.000	1.430	3878.590	-0.000	1.420
31.	7150.337	0.000	-0.840	3912.012	0.310	1.430	3878.202	0.320	1.420
32.	7150.335	0.000	-0.840	3912.562	0.600	1.420	3877.650	0.610	1.420
33.	7150.331	0.000	-0.830	3913.436	0.850	1.410	3876.775	0.860	1.410
34.	7150.326	0.000	-0.830	3914.562	1.060	1.400	3875.826	1.070	1.390
35.	7150.320	0.000	-0.820	3915.983	1.220	1.380	3874.265	1.230	1.350
36.	7150.312	0.000	-0.800	3917.466	1.330	1.360	3872.739	1.350	1.360
37.	7150.303	0.000	-0.790	3919.106	1.410	1.330	3871.095	1.430	1.330
38.	7150.293	0.000	-0.770	3920.824	1.460	1.300	3869.374	1.460	1.310
39.	7150.282	0.010	-0.750	3922.565	1.490	1.270	3867.606	1.510	1.270
40.	7150.270	0.010	-0.730	3924.374	1.500	1.230	3865.817	1.520	1.240
41.	7150.257	0.010	-0.710	3926.157	1.490	1.190	3864.026	1.510	1.200
42.	7150.244	0.010	-0.690	3927.922	1.460	1.150	3862.259	1.490	1.160
43.	7150.230	0.010	-0.660	3929.654	1.430	1.100	3860.523	1.460	1.110
44.	7150.216	0.010	-0.630	3931.336	1.380	1.060	3858.833	1.410	1.070
45.	7150.202	0.010	-0.600	3932.965	1.330	1.000	3857.201	1.360	1.010
46.	7150.188	0.010	-0.570	3934.525	1.270	0.950	3855.637	1.300	0.960
47.	7150.174	0.010	-0.530	3936.009	1.200	0.890	3854.148	1.230	0.900
48.	7150.160	0.010	-0.500	3937.410	1.130	0.830	3852.742	1.160	0.840
49.	7150.147	0.010	-0.460	3938.721	1.050	0.770	3851.426	1.080	0.780

111-PLANE YIG										BULK		
	LNGWEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13			
50.	7156.134	-0.010	-0.420	3939.937	.970	.710	3950.206	-1.000	.720			
51.	7156.122	-0.010	-0.380	3941.052	.890	.640	3963.087	-1.510	.650			
52.	7156.111	-0.000	-0.340	3942.061	.800	.560	3966.074	-1.620	.570			
53.	7156.101	-0.000	-0.300	3943.961	.700	.510	3947.171	-1.720	.520			
54.	7156.092	-0.000	-0.260	3943.746	.610	.440	3946.381	-1.620	.440			
55.	7156.084	-0.000	-0.220	3944.416	.510	.370	3945.707	-1.520	.370			
56.	7156.076	-0.000	-0.180	3944.971	.410	.290	3945.153	-1.420	.300			
57.	7156.073	-0.000	-0.130	3945.602	.310	.220	3944.720	-1.320	.230			
58.	7156.069	-0.000	-0.090	3945.712	.210	.150	3944.409	-1.210	.150			
59.	7156.067	-0.000	-0.040	3945.896	.100	.070	3944.222	-1.110	.080			
60.	7156.066	-0.000	-0.000	3945.960	0.000	0.000	3944.160	0.000	-0.000			
61.	7156.067	0.000	.040	3945.896	-0.100	-0.070	3944.222	.110	-0.080			
62.	7156.069	0.000	.090	3945.712	-0.210	-0.150	3944.409	.210	-0.150			
63.	7156.073	0.000	.130	3945.402	-0.310	-0.220	3944.720	.320	-0.230			
64.	7156.076	0.000	.180	3944.971	-0.410	-0.290	3945.153	.420	-0.300			
65.	7156.084	0.000	.220	3944.416	-0.510	-0.370	3945.707	.520	-0.370			
66.	7156.092	0.000	.260	3943.746	-0.610	-0.440	3946.381	.620	-0.440			
67.	7156.101	0.000	.300	3942.961	-0.700	-0.510	3947.171	.720	-0.520			
68.	7156.111	0.000	.340	3942.061	-0.800	-0.560	3946.074	.820	-0.570			
69.	7156.122	0.000	.380	3941.052	-0.900	-0.640	3945.087	.910	-0.650			
70.	7156.134	0.010	.420	3939.937	-1.000	-0.710	3950.206	1.000	-0.720			
71.	7156.147	0.010	.460	3938.721	-1.050	-0.770	3951.426	1.060	-0.780			
72.	7156.160	0.010	.500	3937.410	-1.130	-0.830	3952.742	1.160	-0.840			
73.	7156.174	0.010	.530	3936.009	-1.200	-0.890	3954.146	1.230	-0.900			
74.	7156.186	0.010	.570	3934.525	-1.270	-0.950	3955.637	1.300	-0.960			
75.	7156.202	0.010	.600	3932.965	-1.330	-1.000	3957.201	1.360	-1.010			
76.	7156.216	0.010	.630	3931.336	-1.360	-1.060	3958.833	1.410	-1.070			
77.	7156.230	0.010	.660	3929.654	-1.430	-1.100	3960.523	1.460	-1.110			
78.	7156.244	0.010	.690	3927.922	-1.460	-1.150	3962.259	1.490	-1.160			
79.	7156.257	0.010	.710	3926.157	-1.490	-1.190	3964.028	1.510	-1.200			
80.	7156.270	0.010	.730	3924.374	-1.500	-1.230	3965.817	1.520	-1.240			
81.	7156.282	0.010	.750	3922.589	-1.490	-1.270	3967.606	1.510	-1.270			
82.	7156.293	0.000	.770	3920.824	-1.460	-1.300	3969.374	1.460	-1.310			
83.	7156.303	0.000	.790	3919.106	-1.410	-1.330	3971.045	1.430	-1.330			
84.	7156.312	0.000	.800	3917.466	-1.330	-1.360	3972.739	1.390	-1.360			
85.	7156.320	0.000	.820	3915.943	-1.220	-1.360	3974.465	1.230	-1.360			
86.	7156.326	0.000	.830	3914.582	-1.060	-1.400	3976.228	1.070	-1.350			
87.	7156.331	0.000	.830	3913.436	-0.850	-1.410	3978.075	.860	-1.350			
88.	7156.335	0.000	.840	3912.562	-0.600	-1.420	3979.951	.610	-1.420			
89.	7156.337	0.000	.840	3912.032	-0.310	-1.430	3981.824	.320	-1.420			
90.	7156.336	-0.000	.850	3911.824	0.000	-1.430	3983.690	0.000	-1.420			
91.	7156.337	-0.000	.840	3912.032	.310	-1.430	3985.520	.320	-1.420			
92.	7156.335	-0.000	.840	3912.562	.600	-1.420	3987.351	.610	-1.420			
93.	7156.331	-0.000	.830	3913.436	.850	-1.410	3989.175	.860	-1.410			
94.	7156.326	-0.000	.830	3914.582	1.060	-1.400	3991.045	1.070	-1.390			
95.	7156.320	-0.000	.820	3915.943	1.220	-1.390	3992.951	1.230	-1.380			
96.	7156.312	-0.000	.800	3917.466	1.330	-1.360	3994.824	1.340	-1.350			
97.	7156.303	-0.000	.790	3919.106	1.410	-1.330	3996.690	1.420	-1.330			
98.	7156.293	-0.000	.770	3920.824	1.460	-1.300	3998.520	1.460	-1.310			
99.	7156.282	-0.010	.750	3922.589	1.490	-1.270	3999.374	1.490	-1.270			

111-PLANE YIG

BULK

	LNGVEL	LPHI12	LPHI13	FSPVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
188.	7158.270	-0.010	-0.730	3924.374	1.500	-1.230	3862.817	-1.520	-1.240
189.	7158.257	-0.010	-0.710	3926.157	1.490	-1.190	3864.028	-1.510	-1.200
190.	7158.244	-0.010	-0.680	3927.922	1.480	-1.150	3865.259	-1.490	-1.160
191.	7158.230	-0.010	-0.660	3929.654	1.430	-1.100	3866.523	-1.460	-1.110
192.	7158.216	-0.010	-0.630	3931.338	1.380	-1.060	3867.833	-1.410	-1.070
193.	7158.202	-0.010	-0.600	3932.965	1.330	-1.000	3869.181	-1.360	-1.010
194.	7158.188	-0.010	-0.570	3934.525	1.270	-0.950	3870.567	-1.300	-0.960
195.	7158.174	-0.010	-0.530	3936.009	1.200	-0.890	3871.995	-1.230	-0.900
196.	7158.160	-0.010	-0.500	3937.410	1.130	-0.830	3873.466	-1.160	-0.840
197.	7158.147	-0.010	-0.460	3938.721	1.050	-0.770	3874.979	-1.090	-0.780
198.	7158.134	-0.010	-0.420	3940.052	0.970	-0.710	3876.526	-1.020	-0.720
199.	7158.122	-0.010	-0.380	3941.416	0.890	-0.640	3878.107	-0.950	-0.650
200.	7158.111	-0.000	-0.340	3942.861	0.800	-0.580	3879.717	-0.880	-0.590
201.	7158.101	-0.000	-0.300	3944.286	0.700	-0.510	3881.351	-0.800	-0.520
202.	7158.092	-0.000	-0.260	3945.696	0.610	-0.440	3883.007	-0.720	-0.450
203.	7158.084	-0.000	-0.220	3947.091	0.510	-0.370	3884.681	-0.640	-0.380
204.	7158.078	-0.000	-0.180	3948.468	0.410	-0.300	3886.371	-0.560	-0.310
205.	7158.073	-0.000	-0.130	3949.837	0.310	-0.220	3888.087	-0.480	-0.230
206.	7158.069	-0.000	-0.090	3951.192	0.210	-0.150	3889.827	-0.400	-0.160
207.	7158.067	-0.000	-0.040	3952.536	0.100	-0.070	3891.591	-0.320	-0.090
208.	7158.066	0.000	-0.000	3953.860	0.000	0.000	3893.381	-0.240	-0.000
209.	7158.067	0.000	-0.040	3955.166	-0.100	0.070	3895.197	-0.160	0.000
210.	7158.069	0.000	-0.090	3956.456	-0.210	0.150	3897.037	-0.080	0.050
211.	7158.073	0.000	-0.130	3957.732	-0.310	0.220	3898.897	0.000	0.100
212.	7158.078	0.000	-0.180	3959.001	-0.410	0.290	3899.777	0.080	0.170
213.	7158.084	0.000	-0.220	3960.256	-0.510	0.370	3900.677	0.160	0.260
214.	7158.092	0.000	-0.260	3961.501	-0.610	0.440	3901.597	0.240	0.350
215.	7158.101	0.000	-0.300	3962.736	-0.700	0.510	3902.537	0.320	0.440
216.	7158.111	0.000	-0.340	3963.961	-0.800	0.580	3903.497	0.400	0.530
217.	7158.122	0.010	-0.380	3965.176	-0.900	0.640	3904.477	0.480	0.620
218.	7158.134	0.010	-0.420	3966.381	-1.000	0.710	3905.467	0.560	0.710
219.	7158.147	0.010	-0.460	3967.576	-1.090	0.770	3906.477	0.640	0.800
220.	7158.160	0.010	-0.500	3968.761	-1.130	0.830	3907.497	0.720	0.890
221.	7158.174	0.010	-0.530	3969.936	-1.200	0.890	3908.527	0.800	0.980
222.	7158.188	0.010	-0.570	3971.101	-1.270	0.950	3909.567	0.880	1.070
223.	7158.202	0.010	-0.600	3972.256	-1.330	1.000	3910.627	0.960	1.160
224.	7158.216	0.010	-0.630	3973.401	-1.380	1.060	3911.697	1.040	1.250
225.	7158.230	0.010	-0.660	3974.536	-1.430	1.100	3912.777	1.120	1.340
226.	7158.244	0.010	-0.680	3975.661	-1.480	1.150	3913.867	1.200	1.430
227.	7158.257	0.010	-0.710	3976.776	-1.530	1.190	3914.967	1.280	1.520
228.	7158.270	0.010	-0.730	3977.881	-1.580	1.230	3916.077	1.360	1.610
229.	7158.282	0.010	-0.750	3978.976	-1.630	1.270	3917.197	1.440	1.700
230.	7158.293	0.000	-0.770	3980.061	-1.680	1.300	3918.327	1.520	1.790
231.	7158.303	0.000	-0.790	3981.136	-1.730	1.330	3919.467	1.600	1.880
232.	7158.312	0.000	-0.800	3982.201	-1.780	1.360	3920.617	1.680	1.970
233.	7158.326	0.000	-0.830	3983.256	-1.830	1.380	3921.777	1.760	2.060
234.	7158.331	0.000	-0.850	3984.301	-1.880	1.400	3922.937	1.840	2.150
235.	7158.335	0.000	-0.860	3985.336	-1.930	1.420	3924.097	1.920	2.240
236.	7158.337	0.000	-0.840	3986.361	-1.980	1.430	3925.257	2.000	2.330

	111-PLANE YIG				BULK			
	LNGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12
150.	7158.338	-0.000	-0.850	3911.824	0.000	1.430	3876.390	SSPM113
151.	7158.337	-0.000	-0.840	3912.012	.310	1.430	3876.202	1.420
152.	7158.335	-0.000	-0.840	3912.562	.600	1.420	3877.650	1.420
153.	7158.331	-0.000	-0.830	3913.436	.850	1.420	3876.775	1.410
154.	7158.326	-0.000	-0.830	3914.582	1.060	1.400	3875.628	1.390
155.	7158.320	-0.000	-0.820	3915.943	1.220	1.360	3874.265	1.300
156.	7158.312	-0.000	-0.800	3917.466	1.330	1.360	3872.739	1.350
157.	7158.303	-0.000	-0.790	3919.106	1.414	1.330	3871.095	1.330
158.	7158.293	-0.000	-0.770	3920.824	1.460	1.300	3869.374	1.310
159.	7158.282	-0.010	-0.750	3922.569	1.490	1.270	3867.606	1.270
160.	7158.270	-0.010	-0.730	3924.374	1.500	1.230	3865.817	1.240
161.	7158.257	-0.010	-0.710	3926.157	1.490	1.190	3864.028	1.200
162.	7158.244	-0.010	-0.660	3927.922	1.460	1.150	3862.259	1.190
163.	7158.230	-0.010	-0.660	3929.654	1.430	1.100	3860.523	1.160
164.	7158.216	-0.010	-0.630	3931.336	1.360	1.060	3858.833	1.110
165.	7158.202	-0.010	-0.600	3932.965	1.330	1.000	3857.201	1.010
166.	7158.188	-0.010	-0.570	3934.525	1.270	.950	3855.637	.960
167.	7158.174	-0.010	-0.530	3936.009	1.200	.850	3854.148	.900
168.	7158.160	-0.010	-0.500	3937.410	1.130	.830	3852.742	.840
169.	7158.147	-0.010	-0.460	3938.721	1.050	.770	3851.426	.790
170.	7158.134	-0.010	-0.420	3939.937	.970	.710	3850.206	.720
171.	7158.122	-0.010	-0.360	3941.052	.890	.640	3849.087	.650
172.	7158.111	-0.000	-0.340	3942.061	.800	.560	3848.074	.560
173.	7158.101	-0.000	-0.300	3942.961	.700	.510	3847.171	.520
174.	7158.092	-0.000	-0.260	3943.748	.610	.440	3846.361	.440
175.	7158.084	-0.000	-0.220	3944.416	.510	.370	3845.707	.390
176.	7158.078	-0.000	-0.180	3944.971	.410	.250	3845.153	.300
177.	7158.073	-0.000	-0.130	3945.402	.310	.220	3844.720	.230
178.	7158.069	-0.000	-0.090	3945.712	.210	.150	3844.409	.150
179.	7158.067	-0.000	-0.040	3945.898	.100	.070	3844.222	.080
180.	7158.066	0.000	-0.000	3945.960	0.000	0.000	3844.160	-0.000

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BULK

	LNQVEL	LPN112	LPN113	FSRVEL	FSPN112	FSPN113	SSRVEL	SSPN112	SSPN113
0.	7139.577	-0.000	-0.000	3912.321	1.400	0.000	3912.320	-1.400	-0.000
1.	7139.624	.040	-0.000	3913.913	1.270	-0.000	3910.643	-1.420	-0.000
2.	7139.765	.050	-0.000	3915.351	1.140	0.000	3908.946	-1.430	-0.000
3.	7140.004	.130	-0.000	3916.627	1.000	0.000	3907.232	-1.450	-0.000
4.	7140.342	.160	-0.000	3917.734	.860	-0.000	3905.502	-1.460	-0.000
5.	7140.783	.230	-0.000	3918.666	.710	0.000	3903.759	-1.470	-0.000
6.	7141.327	.270	-0.000	3919.423	.560	0.000	3902.005	-1.480	-0.000
7.	7141.975	.320	-0.000	3919.997	.400	-0.000	3900.243	-1.490	-0.000
8.	7142.727	.370	-0.000	3920.386	.250	0.000	3898.473	-1.450	0.000
9.	7143.584	.420	-0.000	3920.586	.090	0.000	3896.700	-1.500	-0.000
10.	7144.545	.460	-0.000	3920.603	-.070	-0.000	3894.923	-1.200	-0.000
11.	7145.606	.510	-0.000	3920.430	-.220	0.000	3893.147	-1.500	-0.000
12.	7146.771	.560	0.000	3920.071	-.360	0.000	3891.372	-1.500	-0.000
13.	7148.033	.600	0.000	3919.528	-.530	0.000	3889.602	-1.490	-0.000
14.	7149.390	.640	-0.000	3918.803	-.680	0.000	3887.836	-1.450	-0.000
15.	7150.835	.650	-0.000	3917.900	-.830	0.000	3886.102	-1.480	-0.000
16.	7152.377	.730	-0.000	3916.823	-.970	-0.000	3884.36	-1.470	-0.000
17.	7153.999	.760	0.000	3915.579	-1.110	0.000	3882.664	-1.460	-0.000
18.	7155.781	.800	-0.000	3914.172	-1.250	0.000	3880.986	-1.450	-0.000
19.	7157.476	.830	-0.000	3912.611	-1.370	-0.000	3879.186	-1.430	-0.000
20.	7159.321	.860	-0.000	3910.903	-1.490	0.000	3877.504	-1.410	-0.000
21.	7161.226	.890	-0.000	3909.057	-1.610	-0.000	3875.843	-1.400	-0.000
22.	7163.192	.910	-0.000	3907.081	-1.710	0.000	3874.206	-1.320	-0.000
23.	7165.206	.930	-0.000	3904.986	-1.810	-0.000	3872.594	-1.360	-0.000
24.	7167.263	.950	-0.000	3902.782	-1.900	0.000	3871.009	-1.330	-0.000
25.	7169.356	.970	-0.000	3900.479	-1.980	0.000	3869.453	-1.310	-0.000
26.	7171.476	.980	-0.000	3898.090	-2.040	-0.000	3867.928	-1.280	-0.000
27.	7173.622	.990	-0.000	3895.625	-2.100	0.000	3866.436	-1.250	-0.000
28.	7175.779	.990	0.000	3893.097	-2.150	-0.000	3864.980	-1.220	-0.000
29.	7177.942	.990	0.000	3890.517	-2.190	0.000	3863.559	-1.190	0.000
30.	7180.104	.990	-0.000	3887.900	-2.220	0.000	3862.174	-1.160	-0.000
31.	7182.256	.980	-0.000	3885.256	-2.240	0.000	3860.836	-1.120	-0.000
32.	7184.391	.970	-0.000	3882.600	-2.250	0.000	3859.536	-1.090	-0.000
33.	7186.500	.960	-0.000	3879.944	-2.240	-0.000	3858.280	-1.050	-0.000
34.	7188.577	.940	-0.000	3877.300	-2.230	0.000	3857.069	-1.010	-0.000
35.	7190.613	.920	0.000	3874.662	-2.200	0.000	3855.904	-.970	-0.000
36.	7192.601	.900	0.000	3872.102	-2.170	-0.000	3854.787	-.930	-0.000
37.	7194.534	.870	-0.000	3869.572	-2.120	0.000	3853.720	-.890	-0.000
38.	7196.485	.840	-0.000	3867.105	-2.060	0.000	3852.703	-.860	-0.000
39.	7198.407	.800	-0.000	3864.712	-2.000	0.000	3851.739	-.800	-0.000
40.	7199.932	.770	-0.000	3862.405	-1.920	-0.000	3850.829	-.750	-0.000
41.	7201.576	.730	0.000	3860.195	-1.840	0.000	3849.971	-.710	-0.000
42.	7203.131	.690	-0.000	3858.092	-1.740	0.000	3849.170	-.660	0.000
43.	7204.592	.640	-0.000	3856.106	-1.640	0.000	3848.425	-.610	-0.000
44.	7205.954	.600	-0.000	3854.246	-1.530	0.000	3847.737	-.560	-0.000
45.	7207.212	.550	-0.000	3852.522	-1.410	0.000	3847.106	-.510	-0.000
46.	7208.361	.500	-0.000	3850.942	-1.280	-0.000	3846.536	-.460	-0.000
47.	7209.396	.450	-0.000	3849.513	-1.150	0.000	3846.029	-.410	-0.000
48.	7210.315	.390	-0.000	3848.242	-1.020	0.000	3845.578	-.360	-0.000
49.	7211.113	.340	-0.000	3847.134	-.870	0.000	3845.190	-.310	-0.000

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	LNQWEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13			
50.	7211.708	.260	-0.000	3846.136	-1.730	-0.000	3844.863	-1.250	-0.000			
51.	7212.337	.220	-0.000	3845.431	-1.580	0.000	3844.597	-1.200	-0.000			
52.	7212.758	.160	-0.000	3844.843	-1.430	0.000	3844.395	-1.150	-0.000			
53.	7213.051	.100	-0.000	3844.435	-1.270	0.000	3844.234	-1.090	-0.000			
54.	7213.213	.040	-0.000	3844.205	-1.040	0.000	3844.177	-1.040	-0.000			
55.	7213.244	-.020	-0.000	3844.166	.010	0.000	3844.162	.010	0.000			
56.	7213.143	-.080	-0.000	3844.306	.070	0.000	3844.210	.070	0.000			
57.	7212.913	-.130	-0.000	3844.628	.350	0.000	3844.321	.120	-0.000			
58.	7212.552	-.150	0.000	3845.131	.510	0.000	3844.494	.170	-0.000			
59.	7212.063	-.250	-0.000	3845.813	.660	0.000	3844.730	.230	-0.000			
60.	7211.447	-.310	-0.000	3846.670	.810	0.000	3845.026	.260	-0.000			
61.	7210.707	-.370	0.000	3847.696	.950	0.000	3845.387	.330	-0.000			
62.	7209.844	-.420	0.000	3848.893	1.090	0.000	3845.008	.330	-0.000			
63.	7208.864	-.470	0.000	3850.246	1.220	0.000	3846.290	.440	-0.000			
64.	7207.768	-.520	0.000	3851.758	1.350	0.000	3846.832	.490	-0.000			
65.	7206.561	-.570	0.000	3853.415	1.470	0.000	3847.433	.540	-0.000			
66.	7205.246	-.620	0.000	3855.212	1.590	0.000	3848.093	.590	-0.000			
67.	7203.833	-.670	0.000	3857.135	1.690	0.000	3848.811	.640	-0.000			
68.	7202.321	-.710	-0.000	3859.108	1.790	0.000	3849.586	.680	-0.000			
69.	7200.719	-.750	0.000	3861.349	1.880	0.000	3850.416	.730	0.000			
70.	7199.031	-.790	0.000	3863.612	1.960	0.000	3851.302	.780	-0.000			
71.	7197.265	-.820	0.000	3865.966	2.030	0.000	3852.242	.820	-0.000			
72.	7195.426	-.850	0.000	3868.399	2.090	0.000	3853.234	.870	-0.000			
73.	7193.521	-.880	0.000	3870.901	2.150	0.000	3854.277	.910	-0.000			
74.	7191.556	-.910	0.000	3873.459	2.190	0.000	3855.371	.950	-0.000			
75.	7189.544	-.930	0.000	3876.061	2.220	0.000	3856.513	.990	-0.000			
76.	7187.465	-.950	-0.000	3878.694	2.240	0.000	3857.702	1.030	-0.000			
77.	7185.390	-.960	0.000	3881.366	2.250	0.000	3858.938	1.070	-0.000			
78.	7183.266	-.980	0.000	3884.093	2.260	-0.000	3860.217	1.110	-0.000			
79.	7181.121	-.980	0.000	3886.854	2.230	0.000	3861.539	1.140	-0.000			
80.	7178.963	-.990	0.000	3889.666	2.210	-0.000	3862.902	1.160	-0.000			
81.	7176.800	-.990	0.000	3891.885	2.170	0.000	3864.305	1.210	-0.000			
82.	7174.639	-.990	0.000	3894.439	2.130	0.000	3865.744	1.240	-0.000			
83.	7172.488	-.960	0.000	3896.935	2.070	0.000	3867.220	1.270	-0.000			
84.	7170.355	-.970	-0.000	3899.362	2.010	0.000	3868.729	1.290	-0.000			
85.	7168.247	-.960	0.000	3901.707	1.930	0.000	3870.271	1.320	-0.000			
86.	7166.172	-.940	0.000	3903.959	1.850	0.000	3871.842	1.340	-0.000			
87.	7164.137	-.920	0.000	3906.107	1.760	0.000	3873.442	1.370	-0.000			
88.	7162.146	-.900	-0.000	3908.140	1.660	0.000	3875.067	1.390	-0.000			
89.	7160.213	-.870	-0.000	3910.045	1.550	0.000	3876.717	1.410	-0.000			
90.	7158.339	-.850	0.000	3911.823	1.430	0.000	3878.389	1.420	-0.000			
91.	7156.530	-.810	0.000	3913.454	1.310	0.000	3880.081	1.440	-0.000			
92.	7154.793	-.780	-0.000	3914.935	1.180	0.000	3881.791	1.450	-0.000			
93.	7153.133	-.740	-0.000	3916.256	1.040	0.000	3883.517	1.460	-0.000			
94.	7151.554	-.700	0.000	3917.413	.900	0.000	3885.257	1.470	-0.000			
95.	7150.063	-.660	0.000	3918.399	.750	0.000	3887.006	1.480	-0.000			
96.	7148.662	-.620	0.000	3919.206	.600	0.000	3888.768	1.490	-0.000			
97.	7147.354	-.580	0.000	3919.836	.450	0.000	3890.536	1.490	-0.000			
98.	7146.144	-.530	0.000	3920.244	.300	-0.000	3892.309	1.500	-0.000			
99.	7145.034	-.490	-0.000	3920.545	.140	0.000	3894.085	1.500	-0.000			

110-PLANE YIG									
	LMGVEL	LPM112	LPM113	FSRVEL	FSPM112	FSPM113	SSRVEL	SSPM112	SSPM113
100.	7144.025	-440	0.000	3920.616	-0.020	0.000	3995.861	1.500	-0.000
101.	7143.119	-390	0.000	3920.504	-170	0.000	3997.637	1.490	-0.000
102.	7142.317	-340	0.000	3920.203	-330	0.000	3999.408	1.480	-0.000
103.	7141.620	-300	0.000	3919.717	-480	0.000	3901.174	1.460	-0.000
104.	7141.027	-250	0.000	3919.047	-640	-0.000	3902.932	1.470	-0.000
105.	7140.536	-200	0.000	3918.197	-790	-0.000	3904.681	1.460	0.000
106.	7140.151	-150	0.000	3917.171	-930	0.000	3906.447	1.450	0.000
107.	7139.865	-110	-0.000	3915.974	-1070	0.000	3908.139	1.440	0.000
108.	7139.678	-060	0.000	3914.611	-1210	0.000	3909.665	1.420	-0.000
109.	7139.580	-020	0.000	3913.091	-1340	0.000	3911.532	1.410	-0.000
110.	7139.590	020	-0.000	3911.419	-1460	-0.000	3913.199	1.390	0.000
111.	7139.682	060	0.000	3909.605	-1580	0.000	3914.844	1.370	0.000
112.	7139.860	100	0.000	3907.657	-1690	-0.000	3916.464	1.350	0.000
113.	7140.119	140	0.000	3905.505	-1790	-0.000	3918.056	1.320	-0.000
114.	7140.455	170	0.000	3903.398	-1860	-0.000	3919.624	1.300	-0.000
115.	7140.863	200	0.000	3901.109	-1970	0.000	3921.160	1.270	0.000
116.	7141.338	230	0.000	3898.728	-2040	-0.000	3922.664	1.240	0.000
117.	7141.873	260	0.000	3896.266	-2100	0.000	3924.134	1.220	0.000
118.	7142.464	280	0.000	3893.737	-2160	-0.000	3925.569	1.190	0.000
119.	7143.104	300	0.000	3891.152	-2200	0.000	3926.987	1.150	-0.000
120.	7143.788	320	0.000	3888.524	-2230	0.000	3928.326	1.120	-0.000
121.	7144.509	340	0.000	3885.866	-2250	-0.000	3929.645	1.080	0.000
122.	7145.261	350	0.000	3883.191	-2260	0.000	3930.921	1.050	-0.000
123.	7146.038	360	0.000	3880.513	-2260	0.000	3932.154	1.010	0.000
124.	7146.832	370	-0.000	3877.844	-2250	0.000	3933.343	0.970	-0.000
125.	7147.639	370	0.000	3875.196	-2230	0.000	3934.494	0.930	0.000
126.	7148.452	370	0.000	3872.587	-2140	-0.000	3935.574	0.900	0.000
127.	7149.264	370	0.000	3870.025	-2150	-0.000	3936.624	0.850	0.000
128.	7150.070	370	-0.000	3867.524	-2090	-0.000	3937.618	0.810	-0.000
129.	7150.863	360	0.000	3865.095	-2030	0.000	3938.562	0.760	0.000
130.	7151.636	350	0.000	3862.752	-1950	-0.000	3939.453	0.720	-0.000
131.	7152.390	340	0.000	3860.505	-1870	0.000	3940.290	0.680	0.000
132.	7153.113	320	0.000	3858.360	-1770	0.000	3941.073	0.630	0.000
133.	7153.803	310	0.000	3856.345	-1670	-0.000	3941.800	0.580	-0.000
134.	7154.453	290	0.000	3854.451	-1560	0.000	3942.471	0.540	0.000
135.	7155.061	270	0.000	3852.694	-1440	-0.000	3943.085	0.490	-0.000
136.	7155.622	250	-0.000	3851.083	-1310	-0.000	3943.641	0.440	0.000
137.	7156.132	220	0.000	3849.625	-1180	0.000	3944.139	0.390	-0.000
138.	7156.588	200	0.000	3848.328	-1040	-0.000	3944.577	0.340	0.000
139.	7156.987	170	-0.000	3847.198	-890	0.000	3944.956	0.290	-0.000
140.	7157.326	140	0.000	3846.240	-740	-0.000	3945.275	0.240	0.000
141.	7157.604	110	0.000	3845.458	-590	-0.000	3945.533	0.190	-0.000
142.	7157.817	080	0.000	3844.856	-430	-0.000	3945.731	0.140	0.000
143.	7157.966	050	0.000	3844.441	-260	-0.000	3945.868	0.090	-0.000
144.	7158.040	020	0.000	3844.210	-120	-0.000	3945.943	0.040	0.000
145.	7158.064	-010	0.000	3844.160	040	0.000	3945.986	-0.010	0.000
146.	7158.013	-040	0.000	3844.309	200	0.000	3945.911	-0.060	0.000
147.	7157.895	-070	0.000	3844.636	360	0.000	3945.803	-0.120	-0.000
148.	7157.713	-100	0.000	3845.152	520	0.000	3945.634	-0.170	0.000
149.	7157.465	-130	0.000	3845.849	670	0.000	3945.404	-0.220	0.000

110-PLANE YIG										BULK									
LNGVEL		LPHI12		LPHI13		FSRVEL		FSPH112		FSPH113		SSRVEL		SSPH112		SSPH113			
150.	7157.155	--160	0.000	3846.724	0.000	0.000	3945.114	-.820	0.000	0.000	3945.114	-.270	0.000	0.000	0.000	0.000			
151.	7156.784	--160	0.000	3847.773	0.000	0.000	3946.763	-.970	0.000	0.000	3946.763	-.320	0.000	0.000	0.000	0.000			
152.	7156.354	--210	0.000	3848.933	0.000	0.000	3948.353	1.110	0.000	0.000	3948.353	-.370	0.000	0.000	0.000	0.000			
153.	7155.869	--230	0.000	3850.375	0.000	0.000	3949.683	1.250	0.000	0.000	3949.683	-.420	0.000	0.000	0.000	0.000			
154.	7155.332	--260	0.000	3851.915	0.000	0.000	3951.355	1.380	0.000	0.000	3951.355	-.460	0.000	0.000	0.000	0.000			
155.	7154.746	--260	0.000	3853.604	0.000	0.000	3952.766	1.500	0.000	0.000	3952.766	-.510	0.000	0.000	0.000	0.000			
156.	7154.115	--300	0.000	3855.434	0.000	0.000	3954.214	1.620	0.000	0.000	3954.214	-.560	0.000	0.000	0.000	0.000			
157.	7153.443	--320	0.000	3857.397	0.000	0.000	3955.443	1.720	0.000	0.000	3955.443	-.610	0.000	0.000	0.000	0.000			
158.	7152.735	--330	0.000	3859.482	0.000	0.000	3956.667	1.820	0.000	0.000	3956.667	-.650	0.000	0.000	0.000	0.000			
159.	7151.996	--350	0.000	3861.679	0.000	0.000	3957.855	1.910	0.000	0.000	3957.855	-.700	0.000	0.000	0.000	0.000			
160.	7151.232	--360	0.000	3863.976	0.000	0.000	3958.989	1.990	0.000	0.000	3958.989	-.740	0.000	0.000	0.000	0.000			
161.	7150.446	--360	0.000	3866.366	0.000	0.000	3960.070	2.060	0.000	0.000	3960.070	-.780	0.000	0.000	0.000	0.000			
162.	7149.645	--370	0.000	3868.836	0.000	0.000	3961.100	2.120	0.000	0.000	3961.100	-.830	0.000	0.000	0.000	0.000			
163.	7148.836	--370	0.000	3871.371	0.000	0.000	3962.076	2.170	0.000	0.000	3962.076	-.870	0.000	0.000	0.000	0.000			
164.	7148.022	--370	0.000	3873.961	0.000	0.000	3963.007	2.210	0.000	0.000	3963.007	-.910	0.000	0.000	0.000	0.000			
165.	7147.212	--370	0.000	3876.592	0.000	0.000	3963.887	2.240	0.000	0.000	3963.887	-.950	0.000	0.000	0.000	0.000			
166.	7146.411	--370	0.000	3879.251	0.000	0.000	3964.721	2.260	0.000	0.000	3964.721	-.980	0.000	0.000	0.000	0.000			
167.	7145.625	--360	0.000	3881.927	0.000	0.000	3965.509	2.260	0.000	0.000	3965.509	-1.030	0.000	0.000	0.000	0.000			
168.	7144.851	--350	0.000	3884.605	0.000	0.000	3966.253	2.260	0.000	0.000	3966.253	-1.070	0.000	0.000	0.000	0.000			
169.	7144.124	--330	0.000	3887.272	0.000	0.000	3966.954	2.240	0.000	0.000	3966.954	-1.100	0.000	0.000	0.000	0.000			
170.	7143.422	--310	0.000	3889.916	0.000	0.000	3967.614	2.220	0.000	0.000	3967.614	-1.140	0.000	0.000	0.000	0.000			
171.	7142.761	--290	0.000	3892.523	0.000	0.000	3968.234	2.190	0.000	0.000	3968.234	-1.170	0.000	0.000	0.000	0.000			
172.	7142.146	--270	0.000	3895.080	0.000	0.000	3968.816	2.130	0.000	0.000	3968.816	-1.200	0.000	0.000	0.000	0.000			
173.	7141.563	--250	0.000	3897.575	0.000	0.000	3969.352	2.070	0.000	0.000	3969.352	-1.230	0.000	0.000	0.000	0.000			
174.	7141.019	--220	0.000	3899.996	0.000	0.000	3969.844	2.000	0.000	0.000	3969.844	-1.260	0.000	0.000	0.000	0.000			
175.	7140.539	--190	0.000	3902.330	0.000	0.000	3970.293	1.920	0.000	0.000	3970.293	-1.290	0.000	0.000	0.000	0.000			
176.	7140.069	--150	0.000	3904.566	0.000	0.000	3970.601	1.840	0.000	0.000	3970.601	-1.310	0.000	0.000	0.000	0.000			
177.	7139.572	--120	0.000	3906.694	0.000	0.000	3970.772	1.740	0.000	0.000	3970.772	-1.340	0.000	0.000	0.000	0.000			
178.	7139.056	--080	0.000	3908.702	0.000	0.000	3970.812	1.630	0.000	0.000	3970.812	-1.360	0.000	0.000	0.000	0.000			
179.	7138.523	--040	0.000	3910.580	0.000	0.000	3970.718	1.520	0.000	0.000	3970.718	-1.380	0.000	0.000	0.000	0.000			
180.	7139.977	--000	0.000	3912.320	0.000	0.000	3970.491	1.400	0.000	0.000	3970.491	-1.400	0.000	0.000	0.000	0.000			

X-PLANE (YZ-PLANE) ZINC OXIDE (SMITH)

	LNGLVL	LPM12	LPM13	FSRDEL	FSM12	FSM13	SSRDEL	SSM12	SSM13
0.	5882.698	0.000	0.000	2829.153	0.000	0.000	2804.296	0.000	0.000
1.	5882.650	-0.040	0.000	2829.176	0.030	-0.000	2804.275	-0.059	0.000
2.	5882.528	-0.090	0.000	2829.217	0.070	-0.000	2804.210	-0.100	0.000
3.	5882.322	-0.140	0.000	2829.297	0.120	-0.000	2804.192	-0.150	0.000
4.	5882.024	-0.190	0.000	2829.435	0.200	-0.000	2803.952	-0.200	0.000
5.	5881.629	-0.240	0.000	2829.655	0.310	-0.000	2803.754	-0.250	0.000
6.	5881.124	-0.300	0.000	2829.988	0.470	-0.000	2803.522	-0.300	0.000
7.	5880.580	-0.370	0.000	2830.471	0.660	-0.000	2803.264	-0.350	0.000
8.	5879.743	-0.450	0.000	2831.145	0.910	-0.000	2802.924	-0.400	0.000
9.	5878.838	-0.530	0.000	2832.057	1.210	-0.000	2802.563	-0.450	0.000
10.	5877.771	-0.620	0.000	2833.257	1.590	-0.000	2802.167	-0.500	0.000
11.	5876.525	-0.720	0.000	2834.797	2.000	-0.000	2801.717	-0.540	0.000
12.	5875.085	-0.830	0.000	2836.731	2.490	-0.000	2801.233	-0.590	0.000
13.	5873.434	-0.950	0.000	2839.115	3.030	-0.000	2800.711	-0.640	0.000
14.	5871.557	-1.080	0.000	2842.002	3.640	-0.000	2800.144	-0.680	0.000
15.	5869.440	-1.210	0.000	2845.447	4.310	-0.000	2799.543	-0.730	0.000
16.	5867.069	-1.350	0.000	2849.500	5.020	-0.000	2798.911	-0.770	0.000
17.	5864.432	-1.500	0.000	2854.207	5.790	-0.000	2798.236	-0.810	0.000
18.	5861.519	-1.650	0.000	2859.613	6.590	-0.000	2797.524	-0.850	0.000
19.	5858.323	-1.810	0.000	2865.754	7.430	-0.000	2796.780	-0.900	0.000
20.	5854.839	-1.970	0.000	2872.652	8.280	-0.000	2796.000	-0.940	0.000
21.	5851.065	-2.130	0.000	2880.359	9.150	-0.000	2795.187	-0.970	0.000
22.	5847.002	-2.280	0.000	2888.867	10.020	-0.000	2794.341	-1.010	0.000
23.	5842.655	-2.440	0.000	2898.178	10.890	-0.000	2793.464	-1.050	0.000
24.	5838.032	-2.580	0.000	2908.304	11.720	-0.000	2792.554	-1.090	0.000
25.	5833.146	-2.730	0.000	2919.224	12.520	-0.000	2791.620	-1.120	0.000
26.	5828.014	-2.860	0.000	2930.929	13.290	-0.000	2790.655	-1.150	0.000
27.	5822.657	-2.970	0.000	2943.375	14.000	-0.000	2789.662	-1.180	0.000
28.	5817.100	-3.080	0.000	2956.522	14.640	-0.000	2788.645	-1.210	0.000
29.	5811.373	-3.160	0.000	2970.319	15.220	-0.000	2787.507	-1.240	0.000
30.	5805.511	-3.230	0.000	2984.703	15.710	-0.000	2786.334	-1.270	0.000
31.	5999.554	-3.270	0.000	2999.601	16.120	-0.000	2785.144	-1.290	0.000
32.	5993.546	-3.290	0.000	3014.932	16.430	-0.000	2784.833	-1.320	0.000
33.	5987.535	-3.280	0.000	3030.604	16.640	-0.000	2784.311	-1.340	0.000
34.	5981.574	-3.240	0.000	3046.519	16.750	-0.000	2783.684	-1.360	0.000
35.	5975.721	-3.170	0.000	3062.571	16.750	-0.000	2782.901	-1.390	0.000
36.	5970.036	-3.070	0.000	3078.647	16.630	-0.000	2782.001	-1.400	0.000
37.	5964.580	-2.920	0.000	3094.628	16.400	-0.000	2781.001	-1.420	0.000
38.	5959.425	-2.740	0.000	3110.591	16.040	-0.000	2779.925	-1.430	0.000
39.	5954.437	-2.520	0.000	3125.809	15.570	-0.000	2778.784	-1.440	0.000
40.	5950.280	-2.260	0.000	3140.755	14.990	-0.000	2777.583	-1.450	0.000
41.	5946.444	-1.970	0.000	3155.097	14.260	-0.000	2776.349	-1.450	0.000
42.	5943.189	-1.630	0.000	3168.709	13.430	-0.000	2775.084	-1.470	0.000
43.	5940.580	-1.250	0.000	3181.453	12.470	-0.000	2773.763	-1.490	0.000
44.	5938.648	-0.940	0.000	3193.237	11.410	-0.000	2772.413	-1.500	0.000
45.	5937.577	-0.790	0.000	3203.914	10.230	-0.000	2771.062	-1.500	0.000
46.	5937.386	-0.800	-0.000	3213.342	8.950	-0.000	2769.710	-1.500	0.000
47.	5937.929	-0.800	-0.000	3221.539	7.570	-0.000	2768.359	-1.500	0.000
48.	5939.498	1.130	-0.000	3228.295	6.110	-0.000	2766.911	-1.500	0.000
49.	5942.029	1.680	-0.000	3233.567	4.570	-0.000	2763.664	-1.570	0.000

X-PLANE (YZ-PLANE) ZINC OXIDE (SMITH)

	LMW12	LMH13	FSRVEL	FSPH12	FSPH13	SSPVEL	SSPH12	SSPH13
50.	5965.574	2.264	3217.299	2.964	-0.000	2762.627	-1.474	0.000
51.	5958.163	2.809	3239.403	1.310	-0.000	2761.196	-1.461	0.000
52.	5955.748	3.379	3239.872	-1.374	0.000	2759.972	-1.450	0.000
53.	5952.385	3.930	3238.668	-2.074	0.000	2758.752	-1.440	0.000
54.	5948.041	4.480	3235.792	-3.740	0.000	2757.557	-1.420	0.000
55.	5948.594	5.015	3231.219	-5.470	0.000	2756.767	-1.410	0.000
56.	5948.109	5.510	3224.999	-7.130	0.000	2755.195	-1.399	0.000
57.	5948.443	5.969	3217.157	-8.759	0.000	2754.034	-1.379	0.000
58.	5948.242	6.420	3207.741	-10.319	0.000	2752.896	-1.350	0.000
59.	5942.444	6.835	3196.614	-11.800	0.000	2751.776	-1.331	0.000
60.	5935.382	7.191	3184.450	-13.224	0.000	2750.677	-1.304	0.000
61.	5948.979	7.500	3170.716	-14.557	0.000	2749.597	-1.259	0.000
62.	5961.154	7.771	3155.746	-15.740	0.000	2748.534	-1.251	0.000
63.	5977.827	7.990	3139.646	-16.914	0.000	2747.501	-1.220	0.000
64.	5982.906	8.160	3122.484	-17.930	0.000	2746.504	-1.191	0.000
65.	5189.303	9.293	3104.417	-18.850	0.000	2745.517	-1.161	0.000
66.	5123.927	9.163	3085.544	-19.564	0.000	2744.564	-1.124	0.000
67.	5179.589	9.390	3066.817	-20.320	0.000	2743.636	-1.099	0.000
68.	5154.498	9.370	3045.952	-20.880	0.000	2742.747	-1.059	0.000
69.	5171.265	9.300	3025.407	-21.320	0.000	2741.841	-1.010	0.000
70.	5185.904	9.199	3004.747	-21.630	0.000	2740.851	-0.974	0.000
71.	5202.332	9.040	2983.960	-21.814	0.000	2740.255	-0.934	0.000
72.	5217.467	7.853	2963.155	-21.860	0.000	2739.894	-0.891	0.000
73.	5232.232	7.620	2942.511	-21.784	0.000	2739.760	-0.849	0.000
74.	5245.552	7.160	2922.166	-21.564	0.000	2738.070	-0.809	0.000
75.	5264.354	7.944	2902.254	-21.204	0.000	2737.417	-0.759	0.000
76.	5273.583	6.739	2882.904	-20.714	0.000	2736.917	-0.719	0.000
77.	5285.144	5.379	2864.257	-20.070	0.000	2736.234	-0.678	0.000
78.	5294.045	5.981	2846.425	-19.280	0.000	2735.701	-0.624	0.000
79.	5309.121	5.570	2829.531	-18.360	0.000	2735.204	-0.570	0.000
80.	5319.694	5.130	2813.691	-17.280	0.000	2734.754	-0.520	0.000
81.	5329.968	4.580	2799.010	-16.060	0.000	2734.341	-0.478	0.000
82.	5337.553	4.200	2785.504	-14.710	0.000	2733.971	-0.429	0.000
83.	5345.213	3.710	2773.514	-13.214	0.000	2733.642	-0.370	0.000
84.	5351.915	3.210	2762.882	-11.590	0.000	2733.347	-0.320	0.000
85.	5357.633	2.691	2753.754	-9.860	0.000	2733.115	-0.269	0.000
86.	5362.347	2.170	2746.197	-8.020	0.000	2732.917	-0.210	0.000
87.	5365.826	1.650	2740.264	-6.090	0.000	2732.765	-0.159	0.000
88.	5368.568	1.090	2735.996	-4.100	0.000	2732.655	-0.119	0.000
89.	5370.256	0.550	2733.423	-2.060	0.000	2732.585	-0.064	0.000
90.	5370.707	-0.000	2732.563	0.000	0.000	2732.563	0.000	0.000
91.	5370.256	-1.550	2733.423	2.064	0.000	2732.585	0.064	0.000
92.	5368.568	-3.210	2735.996	4.100	0.000	2732.765	0.119	0.000
93.	5365.826	-5.130	2740.264	6.090	0.000	2732.917	0.159	0.000
94.	5362.347	-7.170	2746.197	8.020	0.000	2732.917	0.210	0.000
95.	5357.633	-9.210	2753.754	9.860	0.000	2733.115	0.269	0.000
96.	5351.915	-11.590	2762.882	11.590	0.000	2733.347	0.320	0.000
97.	5345.213	-13.710	2773.514	13.210	0.000	2733.642	0.370	0.000
98.	5337.553	-16.060	2785.504	14.710	0.000	2733.971	0.429	0.000
99.	5329.968	-18.850	2799.010	16.060	0.000	2734.341	0.478	0.000

X-PLANE (YZ-PLANE) ZINC OXIDE (SMITH)

	LNGDEL	LPM12	LPM13	FSRVEL	FSPH12	FSPH13	SSPHVL	SSPH12	SSPH13
100.	6319.494	-5.130	-0.000	2913.691	17.260	0.000	2734.754	.528	0.000
101.	6309.171	-5.570	-0.000	2829.871	18.360	0.000	2735.204	.570	0.000
102.	6286.645	-5.980	-0.000	2866.425	19.260	0.000	2735.701	.620	0.000
103.	6286.164	-6.370	-0.000	2864.257	20.070	0.000	2736.234	.670	0.000
104.	6271.583	-6.730	-0.000	2902.908	20.710	0.000	2736.811	.710	0.000
105.	6268.358	-7.060	-0.000	2902.254	21.280	0.000	2737.427	.760	0.000
106.	6266.552	-7.360	-0.000	2922.166	21.560	0.000	2738.079	.800	0.000
107.	6232.232	-7.620	-0.000	2942.511	21.780	0.000	2738.769	.850	0.000
108.	6217.667	-7.850	-0.000	2963.155	21.860	0.000	2739.494	.890	0.000
109.	6202.332	-8.048	-0.000	2983.960	21.810	0.000	2740.255	.940	0.000
110.	6186.986	-8.190	-0.000	3004.747	21.630	0.000	2741.051	.970	0.000
111.	6171.255	-8.300	-0.000	3025.497	21.320	0.000	2741.881	1.010	0.000
112.	6155.494	-8.370	-0.000	3045.952	20.840	0.000	2742.741	1.050	0.000
113.	6139.689	-8.390	-0.000	3066.013	20.320	0.000	2743.636	1.090	0.000
114.	6123.927	-8.360	-0.000	3085.544	19.840	0.000	2744.560	1.120	0.000
115.	6108.303	-8.290	-0.000	3104.413	19.490	0.000	2745.517	1.160	0.000
116.	6092.906	-8.140	-0.000	3122.484	17.890	0.000	2746.494	1.190	0.000
117.	6077.427	-7.990	-0.000	3139.646	15.910	0.000	2747.481	1.220	0.000
118.	6063.155	-7.770	-0.000	3155.766	15.780	0.000	2748.484	1.250	0.000
119.	6048.979	-7.500	-0.000	3170.735	14.550	0.000	2749.492	1.280	0.000
120.	6035.382	-7.190	-0.000	3184.450	13.270	0.000	2750.572	1.300	0.000
121.	6022.444	-6.830	-0.000	3196.814	11.800	0.000	2751.774	1.310	0.000
122.	6010.242	-6.420	-0.000	3207.741	10.310	0.000	2752.896	1.350	0.000
123.	6008.843	-5.380	-0.000	3217.157	8.750	0.000	2754.034	1.370	0.000
124.	6008.389	-5.510	-0.000	3224.999	7.170	0.000	2755.196	1.390	0.000
125.	6078.694	-5.010	-0.000	3231.219	5.670	0.000	2756.363	1.410	0.000
126.	6070.841	-4.480	-0.000	3234.782	3.780	0.000	2757.557	1.420	0.000
127.	6062.345	-3.930	-0.000	3236.668	2.070	0.000	2758.759	1.430	0.000
128.	6055.744	-3.170	-0.000	3239.872	.370	0.000	2759.972	1.450	0.000
129.	6050.143	-2.800	-0.000	3239.403	-1.310	-0.000	2761.194	1.460	0.000
130.	6045.573	-2.240	-0.000	3237.288	-2.960	-0.000	2762.427	1.470	0.000
131.	6042.029	-1.680	-0.000	3233.567	-4.670	-0.000	2763.665	1.470	0.000
132.	6039.490	-1.130	-0.000	3228.785	-6.110	-0.000	2764.911	1.490	0.000
133.	6037.929	-.600	-0.000	3221.519	-7.570	-0.000	2766.159	1.490	0.000
134.	6037.386	-.090	-0.000	3213.382	-8.950	-0.000	2767.419	1.490	0.000
135.	6037.577	.390	0.000	3203.914	-10.230	-0.000	2768.667	1.490	0.000
136.	6039.688	.840	0.000	3193.217	-11.410	-0.000	2769.917	1.490	0.000
137.	6040.580	1.250	0.000	3181.653	-12.670	-0.000	2771.163	1.490	0.000
138.	6043.189	1.630	0.000	3168.709	-13.870	-0.000	2772.408	1.470	0.000
139.	6046.448	1.970	0.000	3155.097	-14.260	-0.000	2773.643	1.460	0.000
140.	6048.281	2.260	0.000	3140.755	-14.980	-0.000	2774.887	1.450	0.000
141.	6046.637	2.520	0.000	3125.689	-15.570	-0.000	2776.140	1.440	0.000
142.	6046.425	2.740	0.000	3110.391	-16.040	-0.000	2777.325	1.430	0.000
143.	6046.590	2.920	0.000	3094.628	-16.400	-0.000	2778.530	1.420	0.000
144.	6048.034	3.070	0.000	3078.647	-16.530	-0.000	2779.722	1.400	0.000
145.	6048.721	3.170	0.000	3062.571	-16.750	-0.000	2780.901	1.380	0.000
146.	6041.574	3.240	0.000	3046.519	-16.750	-0.000	2782.064	1.360	0.000
147.	6047.535	3.280	0.000	3030.604	-16.640	-0.000	2783.211	1.340	0.000
148.	6047.546	3.290	0.000	3014.972	-16.430	-0.000	2784.339	1.320	0.000
149.	6049.554	3.270	0.000	2999.601	-16.120	-0.000	2785.444	1.290	0.000

X-PLANE (Y-Z-PLANE) ZINC OXIDE (SMITH)

	LMGVEL	LMH12	LMH11	FSRVEL	FSH12	FSH11	SSRVEL	SSH12	SSH11
150.	5005.511	3.239	0.000	2884.783	-15.710	-0.000	2786.536	1.270	0.000
151.	5011.171	3.160	0.000	2870.719	-15.229	-0.000	2787.609	1.269	0.000
152.	5017.100	3.080	0.000	2856.522	-14.640	-0.000	2788.645	1.210	0.000
153.	5022.657	2.973	0.000	2843.375	-14.000	-0.000	2789.862	1.190	0.000
154.	5028.014	2.860	0.000	2830.929	-13.290	-0.000	2790.855	1.159	0.000
155.	5033.165	2.730	0.000	2819.229	-12.520	-0.000	2791.621	1.120	0.000
156.	5038.032	2.580	0.000	2808.304	-11.720	-0.000	2792.555	1.080	0.000
157.	5042.655	2.440	0.000	2808.174	-10.880	-0.000	2793.464	1.050	0.000
158.	5047.082	2.280	0.000	2808.862	-10.020	-0.000	2794.341	1.010	0.000
159.	5051.065	2.130	0.000	2800.159	-9.150	-0.000	2795.187	.970	0.000
160.	5054.839	1.970	0.000	2822.662	-8.280	-0.000	2795.800	.940	0.000
161.	5058.323	1.810	0.000	2855.754	-7.430	-0.000	2796.780	.900	0.000
162.	5061.519	1.650	0.000	2859.617	-6.590	-0.000	2797.525	.850	0.000
163.	5064.432	1.500	0.000	2854.287	-5.790	-0.000	2798.235	.810	0.000
164.	5067.069	1.350	0.000	2849.500	-5.029	-0.000	2798.911	.770	0.000
165.	5069.440	1.210	0.000	2845.447	-4.310	-0.000	2799.549	.730	0.000
166.	5071.557	1.090	0.000	2842.002	-3.640	-0.000	2800.149	.680	0.000
167.	5073.434	.950	0.000	2839.115	-3.030	-0.000	2800.711	.640	0.000
168.	5075.085	.830	0.000	2836.731	-2.490	-0.000	2801.233	.590	0.000
169.	5076.525	.720	0.000	2834.797	-2.000	-0.000	2801.717	.540	0.000
170.	5077.771	.620	0.000	2833.257	-1.580	-0.000	2802.167	.500	0.000
171.	5078.819	.530	0.000	2832.057	-1.210	-0.000	2802.567	.450	0.000
172.	5079.767	.450	0.000	2831.145	-.910	-0.000	2802.924	.400	0.000
173.	5080.580	.370	0.000	2830.671	-.660	-0.000	2803.244	.350	0.000
174.	5081.124	.300	0.000	2829.888	-.470	-0.000	2803.522	.300	0.000
175.	5081.629	.240	0.000	2829.655	-.310	-0.000	2803.754	.250	0.000
176.	5082.024	.190	0.000	2829.835	-.200	-0.000	2803.955	.200	0.000
177.	5082.322	.140	0.000	2829.297	-.120	-0.000	2804.107	.150	0.000
178.	5082.528	.090	0.000	2829.217	-.070	-0.000	2804.210	.100	0.000
179.	5082.550	.040	0.000	2829.176	-.030	-0.000	2804.275	.050	0.000
180.	5082.550	-.000	-0.000	2829.153	0.000	-0.000	2804.295	-0.000	-0.000

X-PLANE (YZ-PLANE) ZINC OXIDE (JAFFE AND BERLINCOURT, BATEMAN)

	LWGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
0.	6000.447	0.000	0.000	2003.391	0.000	-0.000	2799.019	0.000	0.000
1.	6000.463	.020	-0.000	2003.286	-.230	0.000	2799.000	-.043	0.000
2.	6000.505	.030	-0.000	2002.983	-.466	0.000	2796.942	-.059	0.000
3.	6000.501	.040	-0.000	2002.489	-.666	0.000	2796.647	-.130	0.000
4.	6000.671	.050	-0.000	2001.826	-.940	0.000	2796.713	-.160	0.000
5.	6000.767	.050	-0.000	2001.024	-.980	0.000	2796.341	-.220	0.000
6.	6000.056	.040	-0.000	2000.119	-1.070	0.000	2796.332	-.270	0.000
7.	6000.922	.030	-0.000	2079.154	-1.120	0.000	2796.005	-.310	0.000
8.	6000.945	-0.060	0.000	2078.176	-1.100	0.000	2797.000	-.360	0.000
9.	6000.905	-.040	0.000	2077.246	-1.010	0.000	2797.479	-.403	0.000
10.	6000.779	-.090	0.000	2076.422	-.860	0.000	2797.122	-.440	0.000
11.	6000.545	-.160	0.000	2075.766	-.636	0.000	2796.728	-.480	0.000
12.	6000.178	-.240	0.000	2075.345	-.320	0.000	2796.299	-.520	0.000
13.	6079.653	-.330	0.000	2075.228	.070	0.000	2795.634	-.570	0.000
14.	6078.946	-.440	0.000	2075.485	.530	0.000	2795.335	-.610	0.000
15.	6078.032	-.550	0.000	2076.185	1.060	0.000	2794.802	-.650	0.000
16.	6076.819	-.660	0.000	2077.395	1.700	0.000	2794.236	-.680	0.000
17.	6075.493	-.830	0.000	2079.102	2.390	0.000	2793.637	-.720	0.000
18.	6073.826	-.950	0.000	2081.605	3.140	0.000	2793.006	-.760	0.000
19.	6071.868	-1.140	0.000	2084.723	3.966	0.000	2792.344	-.800	0.000
20.	6069.603	-1.310	0.000	2088.586	4.820	0.000	2791.651	-.830	0.000
21.	6067.020	-1.450	0.000	2093.236	5.720	0.000	2790.929	-.870	0.000
22.	6064.117	-1.610	0.000	2098.717	6.650	0.000	2790.178	-.900	0.000
23.	6060.659	-1.850	0.000	2095.050	7.600	0.000	2789.400	-.930	0.000
24.	6057.273	-2.030	0.000	2912.257	8.560	0.000	2788.594	-.960	0.000
25.	6053.351	-2.220	0.000	2920.347	9.500	0.000	2787.762	-.990	0.000
26.	6049.096	-2.350	0.000	2924.316	10.430	0.000	2786.905	-1.020	0.000
27.	6044.524	-2.510	0.000	2939.159	11.440	0.000	2786.025	-1.050	0.000
28.	6039.645	-2.730	0.000	2949.447	12.410	0.000	2785.121	-1.080	0.000
29.	6034.480	-2.880	0.000	2961.348	12.960	0.000	2784.196	-1.100	0.000
30.	6029.095	-3.020	0.000	2973.616	13.680	0.000	2783.250	-1.130	0.000
31.	6023.396	-3.140	0.000	2986.595	14.330	0.000	2782.284	-1.150	0.000
32.	6017.546	-3.240	0.000	3000.218	14.890	0.000	2781.300	-1.170	0.000
33.	6011.536	-3.310	0.000	3014.407	15.350	0.000	2780.298	-1.190	0.000
34.	6005.419	-3.360	0.000	3029.075	15.720	0.000	2779.281	-1.210	0.000
35.	5999.241	-3.360	0.000	3044.124	15.970	0.000	2778.249	-1.230	0.000
36.	5993.056	-3.370	0.000	3059.449	16.110	0.000	2777.203	-1.240	0.000
37.	5986.931	-3.330	0.000	3074.935	16.140	0.000	2776.145	-1.260	0.000
38.	5980.922	-3.250	0.000	3090.462	16.040	0.000	2775.075	-1.270	0.000
39.	5975.100	-3.130	0.000	3105.903	15.810	0.000	2773.996	-1.280	0.000
40.	5969.535	-2.970	0.000	3121.126	15.460	0.000	2772.909	-1.290	0.000
41.	5964.311	-2.770	0.000	3135.996	14.960	0.000	2771.814	-1.300	0.000
42.	5959.474	-2.530	0.000	3150.386	14.370	0.000	2770.714	-1.310	0.000
43.	5955.129	-2.250	0.000	3164.135	13.630	0.000	2769.609	-1.310	0.000
44.	5951.362	-1.920	0.000	3177.126	12.770	0.000	2768.500	-1.320	0.000
45.	5948.166	-1.550	0.000	3189.219	11.770	0.000	2767.391	-1.320	0.000
46.	5945.739	-1.140	0.000	3200.244	10.660	0.000	2766.280	-1.320	0.000
47.	5944.064	-.708	0.000	3210.196	9.420	0.000	2765.171	-1.320	0.000
48.	5943.226	-.220	0.000	3220.040	8.080	0.000	2764.064	-1.310	0.000
49.	5943.201	.250	-0.000	3226.109	6.630	0.000	2762.960	-1.310	0.000

X-PLANE (YZ-PLANE) ZINC OXIDE (JAFFE AND BERLINCOURT, BATEMAN)

	LPHI12	LPHI13	FSRVEL	FSPHI12	FSPHI13	SSRVEL	SSPHI12	SSPHI13
50.	5946.281	-0.000	3231.906	5.190	-0.000	2/61.861	-1.300	0.000
51.	5946.285	-0.000	3236.149	3.490	-0.000	2760.769	-1.290	0.000
52.	5949.284	-0.000	3236.766	1.610	-0.000	2757.605	-1.270	0.000
53.	5953.295	-0.000	3239.707	.090	-0.000	2756.605	-1.270	0.000
54.	5958.379	-0.000	3238.930	-1.670	0.000	2757.544	-1.260	0.000
55.	5964.502	-0.000	3236.413	-3.430	0.000	2756.490	-1.250	0.000
56.	5971.653	-0.000	3232.151	-5.200	0.000	2755.449	-1.230	0.000
57.	5975.806	-0.000	3226.155	-6.940	0.000	2754.422	-1.210	0.000
58.	5988.924	-0.000	3218.454	-8.640	0.000	2753.411	-1.200	0.000
59.	5998.960	-0.000	3209.092	-10.300	0.000	2752.417	-1.180	0.000
60.	6009.856	-0.000	3198.126	-11.660	0.000	2751.440	-1.150	0.000
61.	6021.544	-0.000	3185.637	-13.360	0.000	2750.483	-1.130	0.000
62.	6033.952	-0.000	3171.705	-14.790	0.000	2749.546	-1.110	0.000
63.	6046.997	-0.000	3156.432	-16.110	0.000	2748.630	-1.080	0.000
64.	6060.595	-0.000	3139.926	-17.310	0.000	2747.737	-1.050	0.000
65.	6074.655	-0.000	3122.315	-18.400	0.000	2746.868	-1.020	0.000
66.	6089.063	-0.000	3103.720	-19.370	0.000	2746.024	-0.990	0.000
67.	6103.706	-0.000	3084.274	-20.210	0.000	2745.205	-0.960	0.000
68.	6118.657	-0.000	3064.134	-20.920	0.000	2744.414	-0.930	0.000
69.	6133.631	-0.000	3043.432	-21.510	0.000	2743.650	-0.900	0.000
70.	6148.585	-0.000	3022.322	-21.950	0.000	2742.915	-0.860	0.000
71.	6163.434	-0.000	3000.957	-22.260	0.000	2742.210	-0.830	0.000
72.	6178.091	-0.000	2979.491	-22.430	0.000	2741.536	-0.790	0.000
73.	6192.467	-0.000	2958.074	-22.480	0.000	2740.893	-0.750	0.000
74.	6206.480	-0.000	2936.675	-22.320	0.000	2740.282	-0.710	0.000
75.	6220.050	-0.000	2916.033	-22.050	0.000	2739.705	-0.670	0.000
76.	6233.102	-0.000	2895.702	-21.620	0.000	2739.161	-0.630	0.000
77.	6245.564	-0.000	2876.030	-21.030	0.000	2738.652	-0.590	0.000
78.	6257.370	-0.000	2857.160	-20.260	0.000	2738.177	-0.550	0.000
79.	6268.460	-0.000	2839.230	-19.360	0.000	2737.739	-0.500	0.000
80.	6278.775	-0.000	2822.372	-18.290	0.000	2737.337	-0.460	0.000
81.	6288.284	-0.000	2806.710	-17.050	0.000	2736.971	-0.420	0.000
82.	6296.881	-0.000	2792.351	-15.650	0.000	2736.643	-0.370	0.000
83.	6304.582	-0.000	2779.432	-14.100	0.000	2736.352	-0.330	0.000
84.	6311.331	-0.000	2768.021	-12.400	0.000	2736.100	-0.290	0.000
85.	6317.096	-0.000	2758.213	-10.570	0.000	2735.885	-0.250	0.000
86.	6321.850	-0.000	2750.084	-8.610	0.000	2735.710	-0.190	0.000
87.	6325.571	-0.000	2743.656	-6.550	0.000	2735.573	-0.140	0.000
88.	6328.240	-0.000	2739.097	-4.410	0.000	2735.475	-0.090	0.000
89.	6329.867	-0.000	2736.323	-2.220	0.000	2735.416	-0.050	0.000
90.	6330.303	-0.000	2735.337	0.000	0.000	2735.397	0.000	0.000
91.	6329.647	-0.000	2736.323	2.220	0.000	2735.416	0.000	0.000
92.	6328.240	-0.000	2739.097	4.410	0.000	2735.475	0.000	0.000
93.	6325.571	-0.000	2743.656	6.550	0.000	2735.573	0.000	0.000
94.	6321.850	-0.000	2750.084	8.610	0.000	2735.710	0.000	0.000
95.	6317.096	-0.000	2758.213	10.570	0.000	2735.885	0.000	0.000
96.	6311.331	-0.000	2768.021	12.400	0.000	2736.100	0.000	0.000
97.	6304.582	-0.000	2779.432	14.100	0.000	2736.352	0.000	0.000
98.	6296.881	-0.000	2792.361	15.650	0.000	2736.643	0.000	0.000
99.	6288.284	-0.000	2806.710	17.050	0.000	2736.971	0.000	0.000

X-PLANE (YZ-PLANE) ZINC OXIDE (JAFFE AND BERLINCOURT, BATEMAN)

	LMGVEL	LPM12	LPM13	FSRVEL	FSPM12	FSPM13	SSRVEL	SSPM12	SSPM13
100.	6276.775	-5.170	-0.000	2822.372	18.290	0.000	2737.337	.460	0.000
101.	6266.460	-5.550	-0.000	2839.230	19.360	0.000	2737.739	.500	0.000
102.	6257.370	-5.990	-0.000	2857.160	20.200	0.000	2736.177	.520	0.000
103.	6245.564	-6.360	-0.000	2876.030	21.030	0.000	2736.652	.540	0.000
104.	6233.102	-6.690	-0.000	2895.702	21.620	0.000	2735.161	.630	0.000
105.	6220.050	-7.000	-0.000	2916.033	22.050	0.000	2735.705	.670	0.000
106.	6206.460	-7.260	-0.000	2936.875	22.320	0.000	2740.202	.710	0.000
107.	6192.467	-7.490	-0.000	2958.079	22.450	0.000	2740.693	.750	0.000
108.	6178.091	-7.670	-0.000	2979.491	22.430	0.000	2741.536	.790	0.000
109.	6163.634	-7.820	-0.000	3000.957	22.260	0.000	2742.210	.830	0.000
110.	6148.585	-7.910	-0.000	3022.322	21.950	0.000	2742.915	.860	0.000
111.	6133.631	-7.960	-0.000	3043.432	21.510	0.000	2743.650	.900	0.000
112.	6118.667	-7.960	-0.000	3064.134	20.920	0.000	2744.414	.930	0.000
113.	6103.786	-7.910	-0.000	3084.274	20.210	0.000	2745.205	.960	0.000
114.	6089.083	-7.610	-0.000	3103.720	19.370	0.000	2746.024	.990	0.000
115.	6074.655	-7.660	-0.000	3122.315	18.400	0.000	2746.966	1.020	0.000
116.	6060.595	-7.460	-0.000	3139.928	17.310	0.000	2747.737	1.050	0.000
117.	6046.997	-7.200	-0.000	3156.432	16.110	0.000	2748.630	1.080	0.000
118.	6033.952	-6.900	-0.000	3171.705	14.790	0.000	2749.546	1.110	0.000
119.	6021.544	-6.510	-0.000	3185.637	13.360	0.000	2750.483	1.130	0.000
120.	6009.656	-6.150	-0.000	3198.126	11.880	0.000	2751.440	1.150	0.000
121.	5998.960	-5.710	-0.000	3209.092	10.300	0.000	2752.417	1.160	0.000
122.	5988.924	-5.240	-0.000	3218.454	8.640	0.000	2753.411	1.200	0.000
123.	5979.886	-4.730	-0.000	3226.155	6.940	0.000	2754.422	1.210	0.000
124.	5971.653	-4.200	-0.000	3232.151	5.200	0.000	2755.449	1.230	0.000
125.	5964.502	-3.650	-0.000	3236.413	3.430	0.000	2756.496	1.250	0.000
126.	5958.379	-3.080	-0.000	3238.930	1.670	0.000	2757.544	1.260	0.000
127.	5953.299	-2.510	-0.000	3239.707	-.090	-0.000	2758.609	1.270	0.000
128.	5949.264	-1.940	-0.000	3238.766	-1.610	-0.000	2759.685	1.260	0.000
129.	5946.265	-1.410	-0.000	3236.149	-3.490	-0.000	2760.769	1.290	0.000
130.	5944.261	-.820	-0.000	3231.906	-5.100	-0.000	2761.861	1.300	0.000
131.	5943.261	-.290	-0.000	3226.109	-6.630	-0.000	2762.960	1.310	0.000
132.	5943.226	-.220	0.000	3218.640	-8.080	-0.000	2764.064	1.310	0.000
133.	5944.064	.700	0.000	3210.196	-9.420	-0.000	2765.171	1.320	0.000
134.	5945.739	1.140	0.000	3200.264	-10.660	-0.000	2766.280	1.320	0.000
135.	5948.186	1.550	0.000	3189.219	-11.770	-0.000	2767.391	1.320	0.000
136.	5951.342	1.920	0.000	3177.126	-12.770	-0.000	2768.500	1.320	0.000
137.	5955.129	2.250	0.000	3164.135	-13.630	-0.000	2769.609	1.310	0.000
138.	5959.474	2.530	0.000	3150.340	-14.370	-0.000	2770.714	1.310	0.000
139.	5964.301	2.770	0.000	3135.998	-14.960	-0.000	2771.814	1.300	0.000
140.	5969.535	2.970	0.000	3121.126	-15.460	-0.000	2772.909	1.290	0.000
141.	5975.100	3.130	0.000	3105.903	-15.810	-0.000	2773.996	1.280	0.000
142.	5980.922	3.250	0.000	3090.462	-16.040	-0.000	2775.075	1.270	0.000
143.	5986.931	3.330	0.000	3074.935	-16.140	-0.000	2776.145	1.260	0.000
144.	5993.054	3.370	0.000	3059.444	-16.110	-0.000	2777.203	1.240	0.000
145.	5999.241	3.360	0.000	3044.124	-15.970	-0.000	2778.249	1.230	0.000
146.	6005.419	3.360	0.000	3029.075	-15.720	-0.000	2779.281	1.210	0.000
147.	6011.536	3.310	0.000	3014.407	-15.350	-0.000	2780.296	1.190	0.000
148.	6017.546	3.240	0.000	3000.216	-14.690	-0.000	2781.300	1.170	0.000
149.	6023.398	3.140	0.000	2986.595	-14.330	-0.000	2782.264	1.150	0.000

X-PLANE (YZ-PLANE) ZINC OXIDE (JAFFE AND BERLINCOURT, BATHMAN)

	LNGVEL	LPHI12	LPHI13	FSRVEL	FSPH12	FSPH13	SSRVEL	SSPH12	SSPH13
150.	6029.055	3.020	0.000	2973.616	-13.660	-0.000	2783.250	1.130	0.000
151.	6034.480	2.880	0.000	2961.346	-12.960	-0.000	2784.396	1.000	0.000
152.	6039.645	2.730	0.000	2949.847	-12.170	-0.000	2785.121	1.000	0.000
153.	6044.524	2.570	0.000	2939.159	-11.440	-0.000	2786.025	1.050	0.000
154.	6049.090	2.350	0.000	2929.316	-10.430	-0.000	2786.705	1.020	0.000
155.	6053.351	2.220	0.000	2920.347	-9.530	-0.000	2787.762	.990	0.000
156.	6057.273	2.030	0.000	2912.257	-8.560	-0.000	2788.594	.960	0.000
157.	6060.859	1.850	0.000	2905.050	-7.600	-0.000	2789.400	.930	0.000
158.	6064.107	1.670	0.000	2898.717	-6.650	-0.000	2790.176	.900	0.000
159.	6067.020	1.450	0.000	2893.238	-5.720	-0.000	2790.929	.870	0.000
160.	6069.603	1.310	0.000	2888.586	-4.820	-0.000	2791.651	.830	0.000
161.	6071.866	1.140	0.000	2884.723	-3.960	-0.000	2792.344	.800	0.000
162.	6073.826	.960	0.000	2881.605	-3.140	-0.000	2793.006	.760	0.000
163.	6075.493	.830	0.000	2879.182	-2.350	-0.000	2793.637	.720	0.000
164.	6076.889	.680	0.000	2877.395	-1.700	-0.000	2794.236	.680	0.000
165.	6078.032	.550	0.000	2876.185	-1.080	-0.000	2794.802	.650	0.000
166.	6078.966	.440	0.000	2875.485	-.530	-0.000	2795.335	.610	0.000
167.	6079.653	.330	0.000	2875.226	-.070	-0.000	2795.834	.570	0.000
168.	6080.178	.240	0.000	2875.345	.350	0.000	2796.299	.520	0.000
169.	6080.545	.160	0.000	2875.766	.630	0.000	2796.720	.480	0.000
170.	6080.779	.050	0.000	2876.422	.660	0.000	2797.122	.440	0.000
171.	6080.905	.040	0.000	2877.246	1.010	0.000	2797.500	.400	0.000
172.	6080.945	.000	0.000	2878.178	1.120	0.000	2797.885	.360	0.000
173.	6080.922	-.030	-0.000	2879.154	1.070	0.000	2798.332	.310	0.000
174.	6080.856	-.040	-0.000	2880.119	.980	0.000	2798.741	.270	0.000
175.	6080.767	-.050	-0.000	2881.024	.840	0.000	2798.713	.230	0.000
176.	6080.671	-.050	-0.000	2881.826	.660	0.000	2798.647	.190	0.000
177.	6080.581	-.040	-0.000	2882.489	.460	0.000	2798.442	.150	0.000
178.	6080.509	-.030	-0.000	2882.983	.230	0.000	2798.000	.110	0.000
179.	6080.463	-.020	-0.000	2883.286	.000	0.000	2797.440	.070	0.000
180.	6080.447	-.000	-0.000	2883.391	-0.000	0.000	2797.019	-.000	0.000

